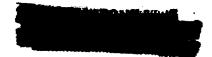
Coastal Zone Information Center



Summary of Report on the

State Land Use Policies and Plan

April 1973



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RHODE ISLAND STATEWIDE PLANNING PROGRAM
265 Melrose Street

Providence, Rhode Island 02907

The Rhode Island Statewide Planning Program, a division of the Department of Administration, is the central planning agency for state government. The work of the Program is guided by the State Planning Council, comprised of state, local and federal representatives. The objectives of the Program are to plan for the physical, economic, and social development of the state; to coordinate the activities of governmental agencies and private individuals and groups within this framework of plans and programs; and to provide planning assistance to the Governor, the General Assembly, and the agencies of state government.

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PRE FACE

This paper presents a summary of Report Number 18, State Land Use Policies and Plan, which was published in preliminary draft form by the Statewide Planning Program in January, 1973. The work on this paper was carried out under the Integrated Grant Administration Program.

Since its inception in 1965 the Statewide Planning Program has been engaged in the development of a land use plan, as a base for other elements of the State Guide Plan which were being prepared. A "preliminary land use plan," consisting of a map and an identification of potential implementation measures, was adopted in 1969 by the Program's Policy Committee. Work on a more detailed plan began in 1970. This plan is documented in the draft report State Land Use Policies and Plan. The report presents goals, explains methodology and relationship to other plans, sets forth policies, and describes implementation methods. Before the draft report was completed, it received detailed technical review by the Program's Subcommittee on State Development Policies.

This summary was prepared by Susan Morrison, Senior Planner, and typed by Mrs. Ann Griffin and Miss Gail Titherington of the Statewide Planning Program staff. Graphics were drafted by Cathy Baldwin.

This paper partially completes the following activity included in the Statewide Planning Program's annual work program for 1972-1973:

37013D State development policies

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INTRODUCTION

Rhode Island's population density of over 900 persons per square mile makes it one of the most highly urbanized places in the world. Yet, by 1960 less than one-quarter of the total land area of the state had been developed for any form of urban use. Since 1960, the situation has suddenly changed. It is projected that, at present rates of urbanization, another one-quarter of the state's land area will be brought into urban use between 1960 and 1990. Much of the new growth will occur in formerly rural areas, where its impact on the environment is most intensive.

The growing proportions of the problems of rapid growth and resource deterioration have focused attention on the potential of land use planning and management. At the local government level in Rhode Island, almost all cities and towns plan for land use. However, local governments are limited in their ability to control development, and some development extends beyond their jurisdiction. In Rhode Island, as elsewhere, state government has not taken an active role in shaping future growth. Rhode Island lacks explicit state policies as to how land should be developed and lacks effective mechanisms for implementing such policies if they did exist. The state land use policies and plan presented in this report are an attempt to fill this vacuum.

There are two other reasons for formulating a state land use policy and plan. First, the land use policy and plan serve as a core for other closely related elements of the State Guide Plan. The future distribution of land uses must be estimated in order to prepare those elements concerned with public facilities and services. Second, the state land use policy and plan serve as a guideand common framework to local governments in preparing land use policies, plans, and regulations and to both state and local governmental agencies and the private sector in making decisions related to land use.

The report on the state land use policies and plan is composed of four major parts. Part One is a statement of goals for land use which establishes the framework for the plan and policies to follow. Part Two presents the state land use plan, in illustrated form; it explains the process by which the plan was developed, defines the land use categories of the plan, and describes relationships with other plans. Part Three consists of a statement of policies for land use which complement the plan. Part Four

considers methods for implementation of the policies and plan.

Although the report represents a completed work, its subject matter will continue to be developed and revised in the immediate future.

PART ONE: GOALS FOR LAND USE

In order to develop land use plans, policies, and programs, it is necessary to formulate goals which set forth the most desirable pattern of state development. The goals provide a useful framework for dealing with problems, even though they will change as desires and priorities change. They are designed to be sufficiently general so that they express values and have flexibility. However, they are specific enough to make clear the development intended.

Most of these land use goals are drawn from a 1969 statement on overall development goals for Rhode Island.

Rhode Island Statewide Planning Program, Goals and Policies for the Development of Rhode Island (Providence, Rhode Island:1969).

A. OVERALL GOALS 1. Population Growth

Goal: RELATE STATE LAND USE POLICIES TO A POPULATION CEILING OF 1.5 MILLION.

Any attempts at land use planning and management must recognize the critical relationship between increasing population and the utilization of land. The growth rate of Rhode Island's population has gradually slowed in recent decades. From 1950 to 1970, the average annual growth rate dropped to 1.0 percent, compared to 1.5 percent nationally. The total population level of the state has grown steadily, however. From 1950 to 1970, the population increased by an average annual amount of about 8,000. At the projected future annual growth rate of approximately 1.0 percent, the average annual increase in population from 1970 to 1990 will be significantly higher than in previous periods: nearly 10,000 persons.

In view of these trends, it is necessary to establish a population goal for Rhode Island as a basis for rational land use planning. Since the state's growth rate has been declining, the sort of goal which seems reasonable is a population "ceiling" rather than a growth rate. Considerable "lead time" is needed to avoid approaching the ceiling. It should also be noted that the migration situation is an important factor.

A population ceiling can be based on a number of different measures. Some of these are: (1) agriculture, (2) raw materials, (3) energy production, (4) population/employment ratio, (5) carrying capacity of air basins, and (6) land consumption. The "land consumption" measure is probably the most applicable to Rhode Island.

Using this measure, the <u>maximum</u> population which could be accommodated in the state can be calculated at about 3.4 million, based on various assumptions. At this population level, the character of the state would be completely changed, with all land urbanized except for recreation sites and undevelopable land. This is obviously a nightmarish vision of the future.

Therefore, Rhode Island must protect some undeveloped areas indefinitely in order to maintain the character of the state, with its expanses of open landscape outside the metropolitan area. There is no practical method of determining how much open space

must be preserved to provide that kind of balance. As of 1960, about 76 percent of the total land area of Rhode Island was undeveloped. A reasonable objective might be to maintain 50 percent in an undeveloped status in the future.

If 50 percent of Rhode Island's area is to remain undeveloped, the state's population ceiling can be calculated at about 1.5 million. This figure compares with a 1970 population of about 0.9 million and a projected 1990 population of about 1.1 million. At the current growth rate, Rhode Island would reach its ceiling between the years 2025 and 2030.

2. Planning for the Environment

Goal: MAKE EFFICIENT USE OF AVAILABLE LAND AND WATER, PRODUCING A VISUALLY PLEASING, COHERENT, AND WORKABLE ENVIRONMENT.

- a. Conserve and protect desirable existing residential, commercial, industrial, and agricultural areas; renew obsolete and deteriorating areas.
- b. Preserve and develop communities with distinctive individual character, based on physical conditions, historical factors, and local desires.
- c. Apply available technology to the problem of accommodating a rapidly shrinking living space and resource base to the needs of present and future residents.
- d. Provide a broad range of choice among good living environments: urban, suburban, and rural.
- e. Reduce air and water pollution, and protect air and water resources which are presently unpolluted.

This goal expresses the primary aim of land use planning. It stems from the fact that natural resources are limited in relation to the number of human inhabitants and activities. Demands are being placed on resources at a rapidly growing rate for a wide range of uses, and development is occurring on a greatly expanded scale. As development pressures intensify, so does the potential for destruction of resources and for wasteful conflicts or pre-emptions of uses. Decisions are made by private developers on

the basis of expediency and profit, or by single-purpose agencies without regard for concerns of other governmental jurisdictions or functions.

In this situation, efficient use of resources becomes a necessity, and a desirable environment becomes a goal to be sought rather than a natural state of affairs to be taken for granted. Failure to take positive action to control development will result in haphazard growth, degrading to the quality of the environment and detrimental to the welfare of the people. There is a need for large-scale, comprehensive land use planning and management, which attempts to relate a wide range of factors in a flexible, foresighted, coordinated program for physical development.

Management of land use has special importance in Rhode Island, one of the most intensively developed states in the country. Furthermore, in contrast to many states, most of the remaining undeveloped land is developable (and rapidly decreasing in amount). The way in which this development is planned will, to a large extent, determine the quality of life in Rhode Island in the future.

3. Planning for Economic Development

- GOAL: SUSTAIN ECONOMIC GROWTH AT A RATE ADEQUATE TO SUPPORT THE STATE'S POPULATION, IN A MANNER CONSISTENT WITH THE STATE'S CHARACTERISTICS, CAPABILITIES, AND ENVIRONMENTAL OBJECTIVES.
 - a. Conserve desirable existing industrial and commercial development.
 - b. Allocate adequate areas to commercial use, and provide desirable sites for industrial development.
 - c. Recognize different size, location, and facilities needs of various types of industrial and commercial activities.
 - d. Relate industrial and commercial development properly to residential and transportation patterns, in order to minimize conflicts and to insure accessibility.

Economic development is necessary to provide goods and services, employment, and tax revenues for public facilities and services

for state residents. A viable economy is not static; it changes in response to changing needs, and it expands when necessary to accommodate expanding labor force and to improve the standard of living. If employment opportunities are not increasing at a rate adequate to support the labor force and if the composition of employment is changing, then efforts must be made to stimulate industrial and commercial development. The needs of business firms must be recognized, and obstacles to attracting desirable development must be removed. As an economy changes and expands, it must also consider the effect of development on regional resources, including natural resources. It is important that new developments be attractively designed and judiciously located so as to minimize all kinds of pollution and conflicts with other land and water uses.

In Rhode Island, the goal of economic development is of extreme importance, in terms of both meeting change and meeting environmental objectives. Expansion represents the most critical need, since the number of new job opportunities is not keeping pace with the growth of the labor force. It is also necessary to adjust to the shift in the composition of employment away from manufacturing. It is vital that attractive industrial acreage be available; presently much industrially zoned land is unsuitable for such development. Proper consideration must be given to regional resources, characteristics, and capabilities, such as water quality and the relationship between employment sources, housing and transportation.

4. Governmental Action

- Goal: CONTINUOUSLY IMPROVE THE STRUCTURE AND OPERATIONS OF GOVERNMENTS AND THEIR RESPONSIVENESS TO THEIR CITIZENS IN THE AREA OF LAND USE PLANNING AND MANAGEMENT.
 - a. Prevent conflicts and duplication between different levels of government, and take into account needs and desires at all levels.

Rhode Island Statewide Planning Program, <u>Land Zoned for Industrial Use: Inventory and Analysis</u>, Technical Paper Number 20 (Providence, Rhode Island: 1972).

- b. Give each level of government the authority and capability to deal with land use problems at its own level.
- c. Provide for adequate revenues to support governmental functions, drawn from flexible sources and equitably assessed.
- d. Develop more direct methods of communication between the citizen and his government.

Improvement of land use planning and management depends on improvements in the political system. InRhode Island, land development presently tends to occur as a result of many unrelated actions in the private sector. Whatever policy is made, and control is exercised, is primarily at the local level. Local policies, however, are usually vague and have not been formulated with reference to any overall policy. Local control is hampered by several factors, most notably financial imperatives (dependence on the property tax) and inability to deal with problems which spread beyond municipal boundaries.

Local capabilities need to be strengthened so as to improve decision making in matters of local significance. At the same time, the state government's minimal role in land use control should be expanded. The case for a larger state role is especially strong in Rhode Island, because of its small size and sense of identity and because of the state government's existing functions which are closely related to land use. The state has an interest, involvement, or investment in many plans or programs yet no control over land use issues which affect these functions and transcend local importance. The state has limited control in special types of areas. Its role in land use planning and management is indirect and narrow, however, restricted to the area proper and restricted to single-purpose control rather than comprehensive planning and programming. The federal government is beginning to recognize the need for change, as evidenced in several national land use policy bills aimed at strengthening the states' role.

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B. GOALS FOR SPECIFIC GEOGRAPHIC OR POLICY AREAS

1. Urban Growth

Goal: CONTROL URBAN SPRAWL AND DISPERSION.

- a. Protect existing urban areas, thus extending their useful lives and encouraging present inhabitants to remain.
- b. Develop distinctive communities rather than scattered small subdivisions, with concentrations of commercial and cultural facilities serving all major residential areas; use existing centers as nuclei where appropriate.
- c. Foster more compact urban growth, making more efficient and aesthetic use of land.
- d. Develop commercial areas which are compactly grouped, attractive, and compatible with neighboring uses.
- e. Reduce the cost of urban services.

"Sprawl" is the type of land development in which numerous small pockets of urban development appear at random throughout a basically rural area: This dispersion should be controlled for several reasons: it is expensive and inefficient in terms of public services and facilities; it therefore frequently excludes lower-income residents; it tends to be, although is not always, unaesthetic; it deprives residents of a sense of community; and it pre-empts use of large tracts of land for other important purposes, such as conservation and recreation. Carried to an extreme, it would result in the engulfment of individual communities into massive, unrelieved urban concentrations.

Rhode Island has followed the national trend toward urban sprawl, resulting in disfigured and congested highway strips, in wasteful and monotonous residential patterns, and in needless loss of unspoiled open space. The fact that less-developed communities tend to zone most of their land for medium-low density residential development serves to perpetuate these conditions. Most areas developed with single-family houses on lots of one-half to one acre cannot efficiently be provided with urban services, yet are frequently not spread out enough to utilize individual water supply or sewage disposal arrangements or part-time services. Furthermore, this pattern increases the difficulty of providing sites and utilities for other land uses in the future.

2. Open Space

Goal: PRESERVE AND PROTECT OPEN SPACE, INCLUDING RECREATION AND CON-SERVATION AREAS, UNDEVELOPED LAND, AND SELECTED AGRICULTURAL AND FOREST AREAS, SO AS TO ENHANCE THE TOTAL QUALITY OF THE ENVIRONMENT.

- a. Insure the sound use and development of the natural resource base.
- b. Consider open space requirements in terms of complete ecological systems.
- c. Protect and enhance scenic values.
- d. Retain some undeveloped or natural areas in their present condition indefinitely, in order to provide a land reserve for long-term future needs and to protect rural areas which provide a wildlife habitat or which give shape and order to urban growth.
- e. Preserve selected areas in agricultural and forest use.
- f. Provide adequate and diverse recreational opportunities, which meet needs of all age and income groups throughout the state and which relate the type and size of facilities to pertinent characteristics of the service area.

The importance of open space has several dimensions. First, open space provides the increasing recreational opportunities desired by the citizens. Rhode Island's most recent recreation plan estimates that the state's recreation needs will call for 15,000 additional acres between 1970 and 1990. Another aspect of the goal of preserving open space is conservation. Destruction of the natural resource base is an irreplaceable loss to the community. Open space also has an economic value; for one thing, it is the major factor in attracting the state's substantial tourist trade. Finally, open space in the form of agricultural and forest areas serves several purposes: it provides a limited agricultural base, furnishes a land reserve for long-term future needs, and protects rural areas which offer a wild-life habitat or which give shape and order to urban growth.

³ Rhode Island Statewide Planning Program and Rhode Island Department of Natural Resources, <u>Plan for Recreation</u>. Conservation and <u>Open Space</u>, Report Number 14 (Providence, Rhode Island: 1971), p. 93.

3. Older Central Cities

Goal: REVITALIZE OLDER CENTRAL CITIES, SETTING TARGET POPULATION LEVELS WHICH REFLECT STABILITY.

- a. Reduce urban blight and deterioration.
- b. Provide for adequate and diversified housing and improve the quality of the existing housing stock.
- c. Maintain a diversity of income, racial, ethnic, and employment groups.
- d. Offer opportunities for economic, social, and geographic mobility.
- e. Maximize opportunities for diversity in employment and use of leisure time.
- f. Emphasize the role of central cities as cultural, entertainment, and communications centers.

The physical and economic decline of the nation's older central cities is a well-documented phenomenon. Housing is a desperately serious problem, in terms of both substandard conditions and shortages. Commercial and industrial activities are shifting to suburban locations, eroding the inner-city tax base at the same time that the costs of and demand for services are rising. In most central cities this decline has been accompanied by a trend of increasing concentration of blacks and of poor families.

Rhode Island's older central cities (Central Falls, Newport, Pawtucket, Providence, and Woonsocket) are experiencing all of these difficulties. They are the only communities in the state which declined in total population from 1960 to 1970. They contain large numbers of racial minority-group members, expecially Newport and Providence, and disproportionate numbers of the poor. In the four largest (excluding Central Falls), 17 to 18 percent of all housing units were substandard in 1960. The economic problems of Rhode Island's older central cities are also severe: loss of manufacturing plants, declines in employment, and relatively slow growth in retail sales.

⁴ U.S. Bureau of the Census, <u>U.S. Censuses of Population and Housing:</u>
1960, Census Tracts, Final Report PHC (1) - 122 (Washington, D.C.:
U.S. Government Printing Office, 1962).

4. Shore Region

Goal: PRESERVE, DEVELOP, AND WHERE POSSIBLE, RESTORE THE RESOURCES OF THE COASTAL REGION IN ORDER TO BENEFIT FROM ITS VARIETY OF ASSETS.

- a. Reduce pollution and protect marine life, and enhance the natural qualities of the marine environment.
- b. Prevent deterioration of the shoreline.
- c. Improve harbors, anchorages, and docks.
- d. Reduce the potential loss of life, health hazard, and property damage caused by flooding and extreme tidal action.
- e. Provide employment opportunities in the coastal region, consistent with other goals.
- f. Increase and enhance recreational opportunities in the coastal region.
- g. Reduce conflicts in the coastal region between different uses and between governmental jurisdictions.

In recent years, there has been heightened interest in the nation's coastal areas. Rhode Island has immensely valuable coastal resources, as attested to by the report of a Governor's task force on the coastal zone. The report described at length the coastal area's role in the state, enumerating the various land and water activities and discussing related problems and conflicts. The report concluded that the coastal area, "rich in a variety of natural, commercial, industrial, recreation, and aesthetic. resources, is of immediate and potential value to the present and future development of this state" and that "unplanned or poorly planned development of these resources has destroyed, or has the potential of destroying, the basic natural environment of such areas."

⁵ Report of the Governor's Technical Committee on the Coastal Zone (Providence, Rhode Island: Rhode Island Statewide Planning Program, 1970), p. 110.

5. Transportation

- Goal: DEVELOP A BALANCED, INTEGRATED TRANSPORTATION SYSTEM WHICH PRO-VIDES SAFE, EFFICIENT, AND ECONOMICAL MOVEMENT BETWEEN THE COM-PONENT PARTS OF THE STATE; IMPROVE INTERSTATE TRANSPORTATION.
 - a. Provide a variety of transportation modes designed to meet the differing needs of different people, activities, and purposes of travel.
 - b. Reduce travel time and alleviate congestion.
 - c. Obtain a high aesthetic quality in the transportation system.
 - d. Minimize the impact of transportation systems on the environment, and reduce conflicts with other functions.
 - e. Attempt to minimize the need for transportation, consistent with other goals.

Transportation has an inseparable two-way relationship with land use. On the one hand, different types, levels, and locations of land and water use will produce a demand for different modes, capacities, and arrangements of transportationsystems. On the other hand, the way in which transportation systems are developed will strongly affect land and water use: for example, encouraging industrial development, contributing to a decline in older central-city commercial areas, disrupting neighborhoods. Transportation systems have an enormous potential for affecting the environment, sometimes favorably, but more conspicuously in an adverse way.

Several geographical characteristics of Rhode Island give transportation development added importance. Among these are the state's position in the Northeast Corridor, its central location among the large and medium-sized metropolitan areas and markets of southern New England, its port at Providence and related terminals, and its old (seventeenth and eighteenth century) established transportation patterns. Future upgrading and acquisition of transportation facilities should use space in an attractive and efficient manner and should aim at reducing travel time and cost. A comprehensive, well-designed transportation system is of key importance in land use planning and management.

PART TWO: THE LAND USE PLAN

The land use plan described in this part of the report allocates areas in the state to different categories of activities which occupy land. For some categories, it also indicates the degree or intensity of use. This plan is intended to express the optimum means of achieving the goals set forth in Part One. It is recognized that there may be equally desirable alternative ways to meet some of the goals. Therefore, the plan should be considered in conjunction with the documentation in Part Two and with the policies listed in Part Three in order to determine the intent of the delineations on the map.

A. DEVELOPMENT OF THE LAND USE PLAN

The land use plan allocates areas to land uses over a twenty-year period, to 1990. This time frame was selected in order to utilize projections of population, employment, and other quantifiable data and in order to conform to the other elements of the State Guide Plan.

1. Background for Planning

The initial task in preparing the land use plan was to identify certain socio-economic characteristics of Rhode Island which should be held as "constants" or assumptions. Four basic characteristics were considered: population (growth and distribution), income, employment and labor force, and transportation (automobile, mass transit, and high-speed rail).

2. Formulation of Alternative Patterns

The next step was to formulate a series of five hypothetical land use patterns, reflecting alternative sets of policies and conditions which might guide or influence development. A sketch map was prepared for each alternative. Then the advantages and disadvantages of each alternative in terms of desirability, efficiency, and feasibility were listed. The five alternatives were: (A) continuation of present trends, (B) industrial ring development, (C) outlying communities development, (D) shore region development, and (E) open space/radial corridor development.

3. Factors Used in Evaluation of Alternative Patterns

The next step in preparing the land use plan was to assemble information on various factors which could then be used to evaluate each alternative. Ten factors which influence future development were chosen, and statewide data on these factors was mapped

at a scale of one inch to 6,000 feet, using 92-acre grid squares. The ten factors were: (1) existing urban and committed land uses, (2) limiting physical conditions, (3) public water service, (4) public sewer service, (5) water quality, (6) air quality, (7) highway access, (8) agricultural land, (9) industrial sites, and (10) major commercial centers.

4. Analysis of Alternative Patterns

Next, the factors were applied to each of the five alternative patterns in order to determine the strengths and weaknesses of each. The factors considered as restraints to future development were: lack of highway access, absence of public water, absence of public sewers, and limiting physical conditions. The factor of existing urban and committed areas had been used as a common base for the five alternatives, and the remaining five factors were utilized in a later stage of evaluation.

5. Analysis of Undeveloped Land

The next procedure was to re-examine the development potential of currently vacant land which was being proposed for more intensive use in any alternative plan. First, all the projected developing areas which appeared on the five alternatives were consolidated on a single map and re-shaped according to all the evaluations which had taken place since they were originally developed. At this point, two other maps were prepared, representing summations of positive and negative development factors. The projected developing areas were further altered on the basis of evaluation by these "assets" and "restraints" maps.

6. Synthesis of Alternative Patterns

The evaluation of projected developing areas resulted in a working map which still did not represent a viable land use plan, because it was based on a consolidation of all five alternative plans, each possessing significant assets but also serious restraints. Therefore, a plan was drawn up which incorporated selected aspects of each alternative. This "synthesis" plan was produced by reintroducing for consideration the five development factors which had been omitted from earlier analyses; by cutting back projected developing areas on the basis of a more detailed consideration of physical conditions; and by retracing other stages of the analysis described above in order to eliminate area which would not be needed to accommodate the state's 1990 projected population.

7. Transformation of the Synthesis into a Plan

The last step leading to development of a 1990 land use plan was to transform the synthesis pattern, a generalized pattern of

future growth, into a plan. First, a preliminary plan was prepared by delineating, in free-form design, nine categories of use: residential (at three density levels), commercial, industrial, governmental-institutional, airports, recreation, conservation, agricultural-undeveloped, and seasonal. This map was adopted in 1969 as the state's "Preliminary Land Use Plan, 1990." Further study and revisions led to the final 1990 land use plan (see map on following page). Categories were changed: the seasonal category was absorbed into other uses, and the open space categories were redefined. The other major change was a return to the grid mapping technique.

8. Conclusions

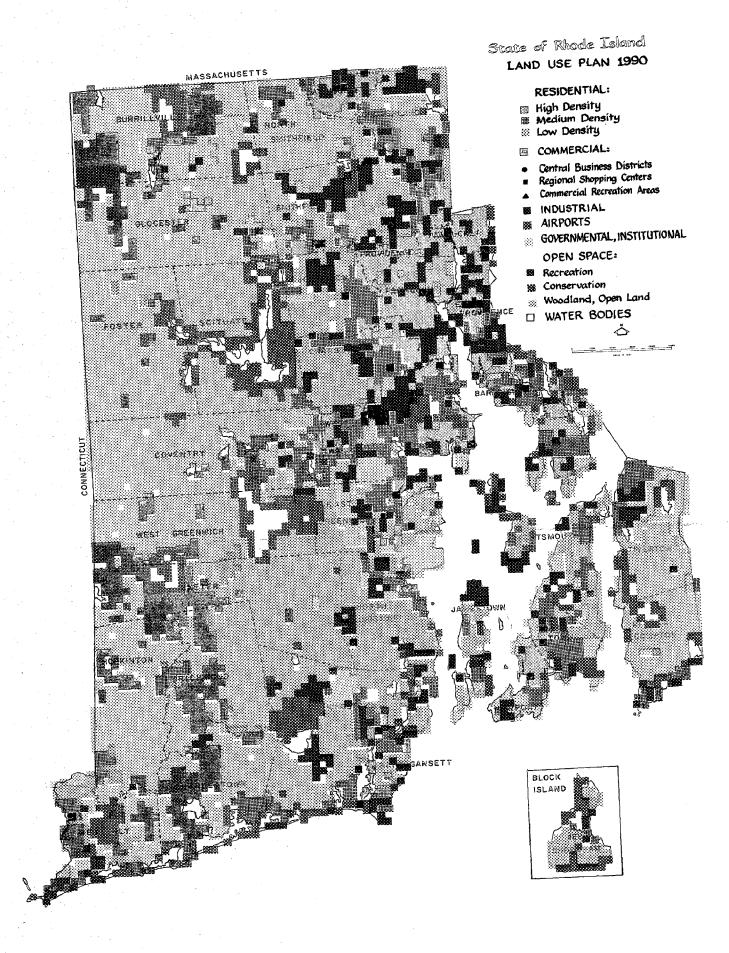
This plan attempts to achieve the state's goals for land use. It promotes compact, directed development, limiting the expansion of urban sprawl and reserving adequate amounts of land for industrial development, for recreational use, and for no development at all. The plan encourages balanced urban development by recognizing not only potential areas of development but also the state's existing assets: its cities, industrial base, and transportation network. The plan makes adequate allowance for open space areas of all kinds: parks, agricultural land, coastal open spaces, and undeveloped expanses in the western part of the state.

Finally, the plan is based on an improved relationship among different levels of government in controlling land use. To the extent that community plans and zoning ordinances have been taken into account, local development goals continue to exercise a strong influence on land use patterns, and municipalities continue to deal with development in their own manner (probably more effectively, because they are better able to keep pace with a more compact development pattern). Since the plan reflects a concern for developments of regional significance, however, it also is in accordance with the concept of a larger state role in controlling development.

B. LAND USE CATEGORIES OF THE PLAN

In developing the "synthesis" map into a land use plan, the initial problem was to allocate areas to the three "basic" land uses: residential, industrial, and recreation. It was then possible to delineate two secondary or supporting land uses, commercial and governmental institutional, whose location is determined by their relationship to the first three. The pattern of the remaining land uses (airports, conservation, and woodland-open land) took form on the basis of the special characteristics and locational needs of these uses.

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1. Basic Land Uses

a. Residential Areas

Description:

The land areas designated in this general category are intended for housing, in addition to associated public and semipublic uses such as schools, recreation areas, local shopping facilities, churches, libraries, police and fire stations, and other essential community facilities which occupy small sites in predominantly residential areas and are an essential part of a complete residential area. The residential land use category includes three density levels a high, medium, and low.

Residential areas in the high-density category are characterized by development at a minimum net density of four dwelling units per acre. The average net density for all these areas throughout the state is 7.5 dwelling units per acre. Within all the high-density areas in the state, about 60 percent of the plan's population capacity would be accommodated. High-density areas would contain a limited amount of single-family housing on small lots, a substantial amount of multiple-family housing at net densities of around 20 or 30 dwelling units per acre, and some housing of much higher density in limited areas which have special site characteristics (such as downtown apartment buildings at a net density of 50 or 60 dwelling units per acre).

As shown in the land use plan, high-density residential areas tend to reflect existing urban centers throughout the state. They would include a correspondingly high density of community facilities. If not already serviced, they would eventually require public water and sewer facilities, particularly in the most intensively developed areas in this density range. Primary and secondary schools would be more predominant than in other types of areas, so that public school transportation would have to be considered only on a limited basis. Such amenities as municipal police and fire departments, libraries, day-care centers, playgrounds, and other community facilities would also be essential in high-density areas.

Residential development of medium-density, generally situated on the fringes of urban areas, ranges from one to four dwelling units per acre, net density. The average net density among all these areas throughout the state is 1.8 dwelling units per acre. In these areas, about one-quarter of the plan's population capacity would be accommodated. The typical housing type in medium-density areas would be the single-family dwelling on a one-quarter to one-half acre lot. There would be some medium-density multiple-dwelling development, such as low-rise apartments or town houses at a net density of fifteen or twenty dwelling units per acre.

In medium-density areas, community facilities would be available to a slightly lesser extent than in high-density areas. Public water and sewer systems would appear in most of the medium-density areas within the next five to ten years. Primary schools would be located within walking distance of many of the children, but public school transportation would be required for this age group in a few areas and for secondary school students in nearly all of the areas. Most medium-density sections would also be served by full-time police and fire departments.

In low-density residential areas, development is anticipated to occur at a maximum net density of one dwelling unit per acre. The average net density in low-density areas throughout the state is .5 dwelling units per acre. Less than five percent of the plan's population capacity would be accommodated in low-density residential areas. The predominant housing type would be the single-family detached dwelling on a large lot. Public water and sewer service would not be available during the time frame of this plan, and most other community facilities would have to be spaced farther apart than in more highly urbanized areas. A low-density level would, however, provide substantial quantities of open space to buffer residential structures from each other.

Background:

Planning for residential land use relied on a study by the Statewide Planning Program of the housing situation in Rhode Island, which covered specific housing problems, obstacles to solving these problems, and immediate needs. This study was concerned with housing as a problem. It is equally valid to view housing as a symptom of much larger and even more difficult problems: national budget priorities and the low income of many households. The important factor for this study is not to determine whether housing is a problem or a symptom, but to consider housing within the whole spectrum of problems and needs which must be dealt with, and to utilize the resources which can be made available to alleviate a broad range of interrelated environmental and development problems.

The background information on housing is presented under the following topics:

HOUSING PROBLEMS

(1) Deficiencies of the existing housing stock

Substandard condition Age Overcrowding

(2) Lack of housing for certain types of households

Low-income households
Moderate-income households
The elderly
Nonwhites
Large families
Single-person households

(3) Problems caused by special features of the state

Rural conditions Seasonal housing College students Military installations

(4) Adjustment to population change

OBSTACLES TO SOLVING HOUSING PROBLEMS

- (1) Lack of government funds and programs
- (2) High total housing costs
- (3) Restrictive zoning laws
- (4) Inadequate public services

IMMEDIATE HOUSING NEEDS

Delineation in plan:

In delineating residential areas at three different densities in the 1990 land use plan, a large portion of the development proposed in the synthesis map was taken up. In the process, locations of development shown in the synthesis were somewhat altered, but the general pattern remained the same. The precise areas to be developed at the three residential densities (high, medium, and low) were calculated for each town or city on the basis of community plans and population projections. The estimated population which could be accommodated in the plan was also calculated, by town or city and by density category. The population capacity figures by town or city generally exceed population projections, and the plan capacity for the whole state is about nine percent greater than the "medium" population. Various reasons account for this difference.

Relation to objectives:

The land use plan sets forth adequate, appropriately located areas for residential use at three distinct density levels. These allocations of land are designed to meet the housing needs described in the preceding sections, to counter the specific problems and obstacles, and also to achieve the state's expressed goals for land use.

In order to meet housing needs, the amounts of residential area shown in the plan have been calculated so as to accommodate the projected 1990 population of the state. The ranges in density make possible a variety of housing types in all parts of the state, thus satisfying the needs of varying household types (low-income, elderly, large, single-person, and so forth) in each community. Provision is made for residential expansion near future sources of employment and near special housing problem areas such as rapidly growing rural areas, seasonal areas, and military bases. (It is expected that residential growth will continue in areas of seasonal housing but that the trend of conversion from seasonal to year-round occupancy will continue, leaving truly seasonal areas only in the least accessible parts of the state by 1990.)

The land use plan is also directed at obstacles to solving housing problems, in particular, cost and zoning obstacles. The distribution of residential density levels throughout the state will allow for more compact and efficient settlement patterns and housing types, thereby reducing cost and limiting the reach of overly restrictive zoning laws.

The residential areas in the land use plan are also designed to accomplish major goals set forth in Part One of this report. arrangement of residential areas makes efficient use of land, by limiting residential expansion to that amount of land needed to accommodate the future population. The residential pattern also promotes the revitalization of older central cities, in that the cities are not neglected in favor of large new areas of residential development; rather, the older urban centers serve as foci of compact fringe growth areas and of small "satellite" urban centers. For the same reasons, the residential land use pattern is a primary means of achieving the goal of controlling urban sprawl. The pattern also recognizes the goals of preserving the shore region and open space, by reserving some of these areas from spreading residential development. Finally, the residential areas are so arranged as to place a balanced load on the state's transportation system.

b. Industrial Areas

Description:

The second "basic" land use to be delineated in the 1990 plan was the industrial category. Although industrial areas in the plan were not classified by distinct types or density levels, as with residential areas, a variety of different uses were considered "industrial": extractive operations, such as gravel mining; manufacturing plants (processing, fabricating, and assembling); closely related non-manufacturing activities (warehousing and storage); public utility installations; and transportation terminals (railroad yards and port facilities), other than airports and military facilities.

Background:

Planning for industrial land use must take into account a complex of related development characteristics and trends, beyond the traditional site selection considerations of soil suitability, access, and so forth. Industrial location should be based on a broad understanding of the economic development problems and needs of the state as a whole, as indicated in the following outline.

INDUSTRIAL LAND USE PROBLEMS

(1) Employment problems

Inadequate number of jobs
Declines in certain employment sectors
Declines in certain employment areas

(2) Meeting demands of industry

Labor
Land
Private investment (by existing firms)
Public investments and services
Community attributes

(3) Maintaining consistency with other objectives

Pollution control
Working conditions
Relationship with population growth

NEEDS FOR INDUSTRIAL LAND

- (1) Employment/labor force ratios by city or town, 1970
- (2) Need for additional employment by area, 1990
- (3) Need for additional manufacturing employment by area, 1990

Delineation in plan:

The industrial areas shown in the land use plan are derived from several sources. The 1961 study of existing land use in Rhode Island indicated that about 5,250 acres of land in the state were being used for manufacturing and extractive purposes. Subsequent reports of the Rhode Island Development Council showed other existing and proposed areas. The 1970 Statewide Planning Program survey of industrially zoned land provided up-to-date findings on existing industrial land use (about 6,220 acres) as well as on proposed future sites. On the basis of all this information, those tracts of land considered to have the highest potential for industrial development were finally incorporated in the land use plan. The total amount of land allocated to industrial use in the plan was more than sufficient to meet the projected need, as explained in the preceding section.

Relation to objectives:

The 1990 pattern of industrial land use was designed so as to conform with the goals, to overcome the problems, and to meet the needs of industrial growth in Rhode Island. The plan allocates sufficient land to meet future employment needs, in appropriate geographical areas (in relation to population centers and the goal of reducing travel time to work), and at acceptable levels of employee density. The industrial areas represent a wide variety of sizes and shapes, locations, and available facilities, in order to broaden the range of employment opportunities, to accommodate special demands of industry, to stabilize the state's economic base through diversification, and to meet water and air quality standards.

All industrial areas included in the land use plan are at least 50 acres in size. All have good access to transportation facilities. Some employment sources are located in older urbanized communities which have a significant number of low-income residents. Industrial development or redevelopment in these communities will take advantage of existing facilities and services while reducing the need to develop areas which are presently in a natural, unspoiled state. In order to have adequate facilities and to minimize pollution, all industrial areas in the plan were analyzed in terms of public sewer service, water service, and protection of water quality. Few industrial areas are placed along the state's coastline or in outlying expanses of open space or areas of prime recreation potential.

c. Recreation Areas

Rhode Island's recreation needs are documented in the state's recreation plan6; therefore, this category is not analyzed in this report in as great detail as the other basic land use categories.

Description:

In the state land use plan (see map), the recreation to category is listed as one type of "open space", distinct from the other types, conservation areas and woodland-openland areas. These three open space categories are very similar in that areas are often retained in a natural or open state and in that intended uses overlap among categories. In most large public "recreation areas," for example, multi-use management allows different recreational uses; conservation is practiced; and development is limited. Open

Rhode Island Statewide Planning Program and Rhode Island Department of Natural Resources, Plan for Recreation, Conservation and Open Space, Report Number 14.

space areas are becoming increasingly indistinguishable as to recreation, conservation, or woodland-open land use.

However, the state land use plan differentiates among these three open space categories, according to both purpose and degree of use and development. The main purpose of a recreation area is to provide active and passive outdoor recreational opportunities (whereas in the case of conservation areas, for example, the main purpose is to protect natural resources or wildlife). The use of a recreation area may generally be assumed to include activities of a more intensive nature than walking, such as hunting, fishing, camping, pichicking, and horseback riding; and some physical development of a recreation area may usually take place, at least to the extent of boat launches, fireplaces, and cleared trails. (In a conservation area, the degree of use and development must be strictly limited by the capacity of the natural resources to withstand any change in character and not endanger its basic purpose.)

Beyond these distinctions, recreation is a broadly defined category of the land use plan. Recreation areas may accommodate a wide variety of uses, both active and passive: parks, management areas, other hunting areas, trails, roadside groves, picnic areas, campsites, parkways, playfields, scenic highways and overlooks, beaches, public fishing and access areas, boat launch sites, docks and moorings, golf courses, archery and rifle ranges, sportsmen's clubs, camps and campgrounds, and ski areas. Recreation areas in the land use plan may be publicly or privately owned. They may be operated as a commercial enterprise, such as a golf course, camp, or beach, as long as they are primarily of a recreational nature. Exceptions are large commercial amusement parks, drive-in theaters, and race tracks, which, although they provide entertainment, are considered more commercial than recreational in nature and therefore belong in the "commercial" category of the land use plan.

Delineation in Plan:

Several steps were taken in delineating the recreation areas of the land use plan. As a starting point, areas shown in the state "Recreation, Conservation and Open Space Inventory" (updated as of 1970 in the recreation plan) were mapped. Next, the short-range (1971-1975) acquisition program outlined in the state recreation plan was incorporated into the land use plan to the extent that areas could be mapped. The additional areas required to meet the state's recreation needs (as calculated in the recreation plan) through the year 1990 were also mapped. Another input to the recreation category was a survey of "unique natural areas" conducted in Rhode Island as part of a regional study 7; certain areas identi-

⁷ Audubon Society of Rhode Island, <u>Unique and Significant Natural Areas of Rhode Island</u> (Providence, Rhode Island: 1972).

fied in this survey could be designated for low-intensity recreational use. Further areas may be added to the recreation category when flood plain studies now planned or underway are completed in a number of communities.

It should be noted that some significant types of recreation areas are not included in the land use plan because of the general character of the plan. These areas may be too small (less than twenty acres) or too narrowly shaped to appear in the plan.

Relation to Objectives:

The delineation of recreation areas which is shown in the land use plan succeeds in meeting several objectives of the plan: control of urban sprawl and dispersion, preservation and development of the shore region, and preservation and protection of open space resources of the state. In particular, the recreation uses shown will enhances scenic values, make public open space accessible to the public in appropriate degrees, reduce pollution (if properly managed), reduce potential hazards of flooding by limiting development of flood-prone areas, and increase the number and variety of recreational opportunities for the people of the state.

2. Supporting Land Uses

a. Commercial Areas

The land use plan includes four distinct types of commercial areas, which vary according to the functions and services offered. One reason for this differentiation is to indicate the scale and nature of the public facilities (mainly transportation) which are needed to support a given type of commercial development.

Central business districts:

Description

The central cores of the major urban areas in the state are indicated in the land use plan as central business districts. Included are Newport, Pawtucket, Providence, Westerly, and Woonsocket. These downtown areas or central business districts serve as the focus of the community in which they are located. They contain a broad spectrum of retail shops and related establishments, including major department stores. Also found are a full range of professional and business offices, cultural and entertainment facilities, and governmental and institutional activities. The presence of all of the latter features is the major distinction between central business districts and other types of commercial areas.

Delineation in plan

Only the existing central business districts in Rhode Island are shown in the land use plan. It is projected that these five areas will retain their function but that no new central business districts will develop.

Relation to objectives

The delineation of these five central business districts in the commercial category of the plan is intended to further the goals of the plan for planning for environment, for older central cities, for urban growth, and for economic development. This allocation conforms with the policies to "provide a broad range of choice among good living environments: urban, suburban, and rural" (by reinforcing the urban alternative); to conserve desirable existing commercial areas and "renew obsolete and deteriorating areas"; to preserve communities with "distinctive individual character"; to stimulate commercial interest in central cities; to "emphasize the role of central cities as cultural, entertainment, and communications centers"; to "promote identification with a neighborhood-communitycity or town hierarchy"; to "develop distinctive communities . . . with concentrations of commercial and cultural facilities"; to "allocate adequate areas to commercial use"; and to "relate . . . commercial development properly to residential and transportation

Regional shopping centers:

Description; delineation in plan

Regional shopping centers are also denoted in the land use plan. This type of commercial area is generally limited to retail shopping establishments such as department stores, supermarkets, chain stores, and specialty shops, sometimes with one or two restaurants, branch banks, and movie theaters. Some regional shopping centers are designed as shopping plazas or malls; others are central town areas, such as East Greenwich. Regional shopping centers are distinguished from local shopping areas on the basis of several characteristics: they serve the needs of communities which are predominantly suburban in character; they serve at least three adjoining communities; they contain at least one large retail establishment such as a major department store or mill outlet; and they include a variety of shops and other commercial uses.

The largest regional shopping centers in the state are two malls located in Warwick which serve the entire state. The land use plan allocates no additional areas for future large (statewide) regional shopping centers. The amount of commercial space provided by these two regional centers plus the central business districts seems adequate to serve the state's 1990 population. These existing centers

are not, however, considered completely detrimental to any communities because of potential adverse effects on the central business districts. Instead, they are seen as a significant factor in stabilizing their own community's tax base and employment rate, as well as furnishing an incentive for other communities to enhance their central business districts by providing good access, off-street parking, adequate public transportation, and other amenities.

The land use plan recognizes other existing regional shopping centers throughout the state. A major source was an unpublished inventory of shopping areas prepared by the Planning Division of the state Department of Transportation. The land use plan also recommends additional smaller regional centers where substantial suburban growth is anticipated.

Relation to objectives

The allocation of regional shopping centers in the commercial category of the land use plan is aimed at meeting the goals of the plan for planning of the environment, for urban growth, and for economic development. Specifically, provision of these commercial areas will allow a broad range of choice among good living environments (suburban, in this case); will conserve desirable existing commercial areas and allocate adequate areas to commercial use; and will relate commercial development properly to residential and transportation patterns.

Commercial recreation areas

This category is designed to encompass commercial recreational uses which cover large tracts of land and are more commercial than recreational in nature. Examples of commercial recreation uses are race tracks, amusement parks, sports arenas, and drive-in theaters. For reasons of scale, only three such areas are illustrated in the future land use plan: two horse racing tracks (in Lincoln and in East Providence/Pawtucket) and an amusement park (in Warwick). All are existing facilities; no future commercial developments of this nature are projected in the plan.

General commercial areas:

This subcategory consists of all large commercial areas in the state other than the three described above. It does not include commercial areas serving a single neighborhood or village and minor highway-oriented commercial areas, which are so small at the scale of the land use plan that they become absorbed into the residential category.

b. Governmental and Institutional Areas

Description:

Large properties throughout the state used by governments, churches, schools, hospitals, and other institutions (except for airports and open space, which form separate categories) are classified as "governmental and institutional" in the land use plan. As with commercial areas, this type of use is considered "secondary" or "supporting." Specific types of governmental and institutional use include naval bases and other military facilities, state correctional and health facilities, cemeteries, and colleges and universities. (Within the naval bases are substantial residential, commercial, industrial, and airport uses, although these are not indicated specifically in the land use plan.)

As with other land use categories, individual parcels of governmental and institutional land use which account for relatively small amounts of area (Coast Guard stations, state buildings, most cemeteries, elementary and secondary schools and small colleges) are not delineated because of the general character of the plan. They are shown as part of the residential areas, which as defined may include other uses which by their nature are integral parts of residential areas.

Delineation in plan:

Almost all of the land denoted as governmental and institutional in the plan is taken from maps of existing land use. Also incorporated into the plan are the newly developed sites for a private college, two junior colleges, and a regional vocational school. Since so much growth has occurred recently, since educational facilities own reserve land, and since it is not the intent of this plan to recommend changes in the educational system, no additional major school areas are illustrated. No large new cemeteries are shown, nor health facility areas, since reserve holdings or minor acquisitions will suffice to meet future needs for these institutional uses. It is also assumed that few large sites will have to be acquired in the next twenty or 30 years to supplement existing governmental landholdings for administrative buildings, educational facilities, and the like. One major reason is that much publicly owned land is now vacant; another is that the trend with the federal government in recent years has been to dispose of rather than to acquire property (mainly, surplus military areas).

Relation to objectives:

By allocating adequate area for governmental and institutional use, without absorbing additional areas, the land use plan recognizes the goal to "balance social, physical, and economic needs in a compatible spatial arrangement."

3. Other Land Uses

a. Airports

Determination of the areas of the land use plan to be reserved for airports was based on a series of reports which comprise Rhode Island's draft state airport system plan. There are five non-military-owned airports in the state which cover an area larger than 100 acres and are therefore shown in the land use plan. All state owned and operated, they are located in Middletown, New Shoreham, Smithfield/Lincoln, Warwick, and Westerly. This system is intended to provide general aviation service to all sections of the state and scheduled commercial passenger and freight service to the metropolitan area. In addition, there are military air facilities in North Kingstown and Charlestown (shown in the governmental and institutional category of the land use plan), a tiny state heliport in Providence, and several small private airports throughout the state.

The airport plan includes development recommendations for land acquisition at four of the five state airports (all except Westerly). These extensions are incorporated into the land use plan. The airport system plan also recommends two additional facilities: a new central Rhode Island airport to be developed during the short term, and the Navy's Charlestown Auxiliary Landing Field, to be acquired or jointly operated as soon as it might become available (i.e., if it is ever declared surplus). The new airport would be utilized as a light-single and twin-engine general aviation facility to absorb the expected growth in private and personal general aviation activity in central Rhode Island. It does not appear in the land use plan because no site has been selected. The field in Charlestown would be used to relieve the Warwick airport from the military operation and aircraft mixture. No major development proposals are contained in the airport plan.

Rhode Island Statewide Planning Program, State Airport System Inventory, Technical Paper Number 14 (Providence, Rhode Island: 1969); State Airport System Plan Aeronautical and Operational Activities, Technical Paper Number 16 (Providence, Rhode Island: 1970); Airline Passenger Ticket Survey, Technical Paper Number 17 and Supplements Number 1, 2, and 3 (Providence, Rhode Island: 1970 and 1971); State Airport System Plan 1970-1990, Report 16, Preliminary Draft (Providence, Rhode Island: 1972).

b. Conservation Areas

Description:

As defined in the land use plan, conservation areas differ from recreation and other open space areas both in purpose and in degree of use and development. The key distinction is that of purpose. The reasons for setting aside a conservation area are "to maintain, restore, and develop distinctive geologic, botanic, historic, and scenic areas; to perpetuate the ecological balance of an area; (and) to conserve natural resources, including wildlife and wildlife habitats. Any use or development of conservation areas must follow from this basic purpose. Use of the areas must be regulated "at a level consistent with environmental management objectives so as to prevent misuse and deterioration." Physical development of conservation areas will therefore tend to be extremely limited, unlike recreation areas, which always can (although not necessarily will) undergo some kind of development.

In spite of these constraints, the conservation category of the land use plan embraces a wide variety of areas: inland and coastal wetlands, flood plains, reservoir watersheds, distinctive topographic and biologic features, wildlife sanctuaries, and the like. These areas may be in private or public ownership, although "state government bears the primary responsibility for the conservation program" and "should take action to protect and maintain the best of its natural features."10Different uses may be permitted in conservation areas, "to the extent that usage will not cause their deterioration," will be compatible, and will not cause changes in their basic character. Thus it may happen that certain "conservation" areas provide the same active and passive outdoor recreation opportunities as many "recreation" areas (particularly, as the multiuse state management areas). Both types of areas might allow nonintensive uses such as hiking, hunting, fishing, and swimming. At the opposite extreme, some conservation areas would be closed entirely to visitors so as to protect exceptionally fragile topographical features or ecosystmes. Other areas would permit public access, but only for passive uses: walking, birdwatching, scenic enjoyment.

Rhode Island Statewide Planning Program and Rhode Island Department of Natural Resources, Plan for Recreation, Conservation and Open Space, Report Number 14, p.106.

¹⁰ Ibid.

Delineation in plan:

The method of delineating conservation areas in the land use plan was parallel to that followed in delineating recreation areas. First, conservation areas appearing in the state "Recreation, Conservation and Open Space Inventory, 1970" were mapped. These included publicly and privately owned marshes, wildlife refuges, bird sanctuaries, certain woodland and watershed areas, and other Audubon Society properties. Next, conservation areas listed in the shortrange (1971-1975) acquisition program of the state recreation plan were added: watershed, wetland, marsh, and some beach areas. Marginal lands around major existing and proposed reservoirs were then shown as conservation areas. The amount of land mapped in each case indicates the proposed or actual acquisition by the state or municipal operating authority. Some of these areas are considered to have potential for low-intensity, non-contact recreational activities such as hiking and fishing which would not be harmful to the water supply sources. Other major sources in formulating the conservation category of the land use plan were the "Rhode Island Salt Water Marsh Inventory" and the survey of unique natural areas in Rhode Island conducted by the Audubon Society.

In the future, some areas identified as flood plains which should not experience any development or intensive use may be added to the conservation category of the plan. Many important conservation areas do not appear in the land use plan because they are too small (less than fifteen or twenty acres) in relation to the general character of the plan.

Relation to objectives:

This pattern of conservation use is in harmony with the objectives of the land use plan to "preserve and protect open space, including . . . conservation areas, "to "consider open space requirements in terms of complete ecological systems," to "insure the sound use and development of the natural resource base," to "enhance and protect scenic values," and to "make public open space accessible to the public in degrees appropriate to its conditions and purpose."

c. Woodland-Open Land

Description:

The third and largest open space category of the land use plan consists of "woodland and open land" areas. These areas would be kept in a relatively open state, free of any intensive development. Only low-intensity uses would be permitted: agriculture and forestry; hiking, hunting, and other passive recreational activities; conservation practices; and the like. Residential land use would be limited to farms and very low-density development (five or more acres

per dwelling unit, with at least 500 feet of frontage, so that public facilities such as water and sewer service would not be required). Most woodland and open land would be in no use at all, however, since it is basically an open space category, not a recreation or residential category. The intent is not to establish large-lot residential districts but to discourage the proliferation of housing and other urban development into every part of the state.

The land in this category would generally be in private owner-ship.

Delineation in plan:

All areas in the land use plan not allocated to some other category of use were placed in the "woodland-open land" category. An attempt was made to include some "prime" agricultural land. Most unique natural areas not designated for recreation or conservation use were also included in this category.

Relation to objectives:

One purpose of setting aside areas in this category is to preserve some of the prime agricultural land in the state. Although the significance of agriculture in the Rhode Island economy has declined, it is an objective of the land use plan that all the remaining agricultural land in the state should not disappear in the next decade or two. A limited agricultural base has a place in Rhode Island, principally in the form of dairy and poultry farms, nurseries and greenhouses, field crops (chiefly potatoes), fruits (chiefly apples), and apiaries.

Agricultural areas represent a very small portion of this category of the land use plan; for the most part, the category consists of simply "undeveloped" land. There are several purposes in allocating land to an "undeveloped" category. One is to contain urban sprawl by providing large buffer zones between areas of concentrated development. These buffer zones also serve to mitigate the effects of air pollution. The provision of undeveloped open space also assures a reserve of land for the long -range future. Another intent of this category is to retain as large an amount of land as possible in its natural state, in order to minimize further disturbance of the ecological balance while still providing adequate area for all urban uses.

4. Quantitative Summary

The following two tables serve to illustrate the land use categories of the plan in quantitative terms. Table 1 lists the areas in each category by town or city. Figures are approximate, because of the general character of the plan. Table 2 compares the distribution of land use existing in 1960 (the latest date for which complete information is available) with the amount of land in the state allocated (not necessarily all in use) to each category of use according to the 1990 plan. The total figures are not the same, partly because of the loss of land to new inland water bodies between 1960 and 1990 and partly because of the approximate nature of the 1990 figures. The types of categories do not coincide exactly, but useful comparisons can still be made.

The amount of land devoted to <u>residential</u> use is nearly tripled during the planning period, both in total amount and as a percentage of all land areas.

The amount of area allocated to commercial land use appears to become less extensive in 1990. This difference is a matter of definition of categories. Only those large areas of commercial use which are shown in the land use plan are included in the 1990 figure for this category, while many small commercial areas are absorbed into the residential category. The 1960 figure, on the other hand, includes every commercial area in the state, regardless of size.

The 1990 plan allows more than three times as much <u>industrial</u> area as existed in 1960.

In the <u>governmental-institutional</u> category, a substantial decrease seems to take place between 1960 and 1990, but again the difference is largely due to change in definition of categories.

Airport holdings in 1990 are slightly larger but continue to represent a very small percentage of the total.

The amount of land allocated for recreation and conservation in the 1990 land use plan (over 115 and over 75 square miles, respectively) is much greater than that which existed in 1960 (about 55 square miles in all). For both 1960 and 1990, woodland-open land is by far the largest of all the categories, although it declines from about 75 percent of the total land area in the state in 1960 to about 50 percent in 1990. At the bottom of Table 2, it is shown that the total amount of developed land (urban and committed) increases from about 25 percent in 1960 to almost 50 percent in 1990. It should be noted, however, that this "developed" land includes not only urban development but also less intensive land uses such as recreation and conservation areas and land allocated or reserved but not yet developed.

Table

DISTRIBUTION OF LAND USE BY TOWN OR CITY, 1990

IAND USE CATEGORY (in acres, rounded to the nearest 100 acres)

Open Space

TOWN OR CITY Residential Commercial Industrial							
Barrington 3,700 100 Bristol 4,000 100 Bristol 6,000 - Central Falls 600 - Charlestown 2,600 - Charlestown 2,600 - Coventry 7,000 100 Cranston 4,200 100 East Greewwich 4,200 100 Exeter 800 - Foster 800 - Glocester 4,200 100 Faster 800 - James town 1,600 - Johnston 4,200 100 Nariagansett 2,900 100 Nariagansett 2,900 100 Nariagansett 4,200 100 Nariagansett 2,900 100 Nariagansett 4,200 100 North Rugstown 5,000 100 Rortsmouth 4,200 100 Rortsmouth 2,600			Governmental- Institutional	Airports	Recreation	Conservation	Woodland- Open Land
Bristol 4,000 100 Brrillville 5,100 Central Falls 600 Coventry 2,600 Coventry 8,100 Cranston 7,000 100 100 East Creenwich 4,700 100 East Providence 4,200 300 1 Exeter 800 Clocester 900 Clocester 2,600 Clocester 2,800 100 11 Clocester 2,800 Clocester 2,900 100 100 Incoln 1,000 200 Maragansett 2,900 100 Intele Compton 1,700 Newport 1,700 100 North Kingstown 5,900 100 North Kingstown 5,900 100 Providence 2,600 North Smithfield 2,600 North Smithfield 2,600 North Smithfield 2,600 North Smithfield 2,600 100 Richmond 1,000 Scituate 1,700 Narvick 1,700 100 Marren 2,900 100 Harren 2,900 100 Marren 2,900 100 Scituate 2,900 100 Nathonsocket 3,400 300 STATE TOTAL 3,000 Square Miles 3,400 300 Square Miles 2,22 Square Miles 2,232 7 Percent of		- 00	700	, 1	700	009	,
Burrillville 5,100 Central Falls 600 Charlestown 2,600 Coventry 8,100 Cumberland 5,300 Casst Providence 4,200 100 East Providence 4,200 100 Exeter 800 Clocester 900 Clocest			200	1	009	200	800
Central Falls 600 Charlestown 2,600 Coventry 8,100 Cranston 7,000 100 Cranston 7,000 100 Cranston 7,000 100 East Providence 4,200 300 1 Exeter 800 Foster 800 Foster 800 Foster 800 Foster 800 Foster 800 Johnston 1,600 Johnston 1,600 Johnston 1,600 Johnston 1,600 Johnston 1,600 Middletown 4,800 100 100 Marraganset 4,200 100 100 North Kingstown 5,000 100 North Smithfield 2,900 100 100 Richmond 5,000 100 100 Richmond 1,000 300 Scituate 8,500 300 Smithfield 2,900 100 100 Marren 5,700 100 100 Marren 5,700 100 100 Westerly 5,000 100 100 Westerly 5,000 100 100 Westerly 7,000 100 West Warwick 3,000 West Warwick 3,000 Woonsocket 3,400 300 Square Miles 7,232 7 Percent of	5,100	- 300	100	•	8,900	3,300	16,400
Charlestown 2,600 Coventry 8,100 Coventry 7,000 100 100 Cumberland 5,300 East Greenwich 4,700 100 East Providence 4,200 300 1 East Providence 4,200 Jamestown 1,600 Jamestown 1,600 Jamestown 1,700 Jamestown 1,700 Jamestown 1,700 Middletown 4,900 100 100 Little Compton 1,700 Middletown 1,700 Middletown 1,700 Middletown 1,700 North Kingstown 5,000 100 100 North Providence 2,900 100 100 North Smithfield 2,600 Fovidence 4,000 300 100 Scituate 4,000 300 Fortsmouth 8,500 100 100 Scituate 1,700 Smithfield 2,900 100 1 Scituate 1,700 100 Scituate 2,900 100 100 Warren 2,900 100 100 Scituate 1,700 100 Scituate 3,400 300 Westerly 7,000 100		300		•	•		1
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East Greenwich 4,700 100 East Providence 4,200 300 Foster 800 - 6100 - 6100 Glocester 800 - 7,800 - 7,800 Jamestown 1,600 - 1,000 100 Lincoln 1,700 4,000 100 Little Compton 1,700 - 7,000 Narragansett 2,900 100 North Kingstown 1,100 - 1,000 North Ringstown 2,900 100 North Smithfield 2,600 - 7,000 100 Richmond 3,100 - 7,000 100 Scituate 1,700 - 7,000 100 Scituate 1,700 - 7,000 100 Scituate 1,700 - 7,000 100 Warren 5,000 100 Wasterly 5,700 100 Wasterly 7,000 100 Wasterly 7,000 100 Westerly 600 - 7,000 Westerly 7,000 100 Westerly 7,000 100 Westerly 7,000 100 Westerly 7,000 100 Westerly 600 - 7,000 Westerly 7,000 100	5,300		1	. •	2,300	800	7,400
East Providence 4,200 300 Exeter 800 - 900	4,700			!	700	200	3,900
Exeter 800 - 600 - 600 - 600 - 600 - 600 - 700 -	4,200		1.	•	2,000	300	
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Table 2
DISTRIBUTION OF LAND USE IN THE STATE, 1960 AND 1990

					•	
	1960 ACRES	O (Actual Us SQ.MI.	e) PERCENT	1990 ACRES*	(Allocati SQ.MI.	on) <u>PERCENT</u>
Residential	54,594	85	. 8	148,300	232	23
Commercial	5,833	9	1	4,200	7	1
Industrial	5,252	8	1	19,300	30	3
Governmental- Institutional	17,002	27	3	14,000	22	2
Airports	2,554	4	-	2,300	4	-
Roads	23,231	36	4	31,900**	50**	-
Other Trans- portation, public utili- ties	10,903	17	2	-		-
Recreation	35,571	56	5	74,600	117	12
Conservation		-	-	48,400	76	7
Woodland, open land	496,623	776	76	338,800	529	52
TOTAL LAND AREA	651,563	1,018	<u>100</u>	649,900	1,017	<u>100</u>
Urban and com- mitted	154,940	242	24	311,100	488	48
Woodland, open land	496,623	776	76	338,800	529	52

^{*} Rounded to nearest 100 acres.

^{**} Estimated; not included in total because is encompassed in other categories.

C. RELATION OF THE LAND USE PLAN TO OTHER PLANS

The land use plan forms one element of the comprehensive guide plan for the future development of Rhode Island. Therefore, it is closely related to the other State Guide Plan elements, which deal with public utility services (water supply and sewage disposal), transportation (mass transit, highways, and airports), and the environment (recreation, conservation and open space; historic preservation). The land use plan allocates areas to activities at different intensities of development. The other plan elements provide for the public facilities which are necessary to support these land use patterns, by programming improvements in both space and time.

The relationship of the land use plan to two other elements, the airport and recreation plans, has been partially documented in explaining the airport and open space categories of the land use plan. The other guide plan elements, although not directly utilized in formulating land use plan categories, were of key importance during other stages in the development of the land use plan. Most of these elements were prepared simultaneously with the land use plan, so that continuous feedback relationships existed; each element both influenced and was influenced by the land use plan.

1. Public Utility Service Plans

a. Water Supply Plan

The state water supply plan¹¹ is closely coordinated with the land use plan. They share the same overall development goals. The two plans are more directly related in that the location of future water service areas delineated in the water supply plan was determined by development patterns projected in the land use plan. In turn, alternative development patterns proposed during the formulation of the land use plan were analyzed in terms of the extent of public water service necessary to support each alternative and in terms of the need to protect ground and surface water sources identified in the water supply plan from adverse development. Thus

¹¹ Rhode Island Statewide Planning Program, Plan for Development and Use of Public Water Supplies, Report Number 10 (Providence, Rhode Island: 1969).

the land use plan conforms with recommendations of the water plan for extension of public water systems to areas not now served, and for development of future water supply sources, as well as with existing and planned reservoir and well sites. Implementation proposals of the land use plan regarding "critical areas" (described in Part Four) take into consideration the state's major water supply sources to 1990.

The public water supply plan was prepared by the Statewide Planning Program with the cooperation of the staffs of the state Division of Water Supply and Pollution Control, Department of Health and of the state Water Resources Board. After analyzing present water systems and forecasting future needs, the plan sets forth proposals for meeting these needs. Included are recommendations and cost estimates for regionalizing services; for establishing centralized distribution systems; for developing supplies, transmission facilities, and treatment plants; and for implementing the plan.

In 1965, 28 separate water systems in Rhode Island provided water to 91 percent of the state's population. The remaining population was served primarily by individual wells. All but seven towns were at least partially served by major public systems. The water supply plan recommends that, in order to provide for the abandonment of existing unacceptable supplies and for the projected growth in demand, new supplies must be developed. In addition to treatment and transmission facilities, four new major sources will have to be developed (Tarkiln Brook in Glocester/Burrillville and Big River in East Greenwich/Coventry by 1980, and Wood River in Exeter/West Greenwich and Nipmuc diversion facilities in Burrillville by 1990). Additional ground water sources will have to be developed in the Upper Branch River basin in Burrillville/North Smithfield (already started) and in the Upper Pawcatuck River basin in Exeter/South Kingstown by 1990.

An updated state water service plan is scheduled to be prepared during fiscal years 1974 and 1975. This plan will again be based on development patterns indicated in the land use plan and will conform with the goals and policies of the land use plan. Some of the land use goals and policies which have particular relevance to the water plan are that water service planning be closely coordinated with recommendations for sewerage facilities, that industrial firms recycle water to a greater extent, and that a population ceiling for the state be established.

b. Sewer Service Plan

The plan for public sewerage facility development, 12 prepared in conjunction with the water supply plan, was instrumental in the formulation of the land use plan. The availability of public sewers was a major factor in the evaluation of alternative land use patterns, to assure that all areas of projected urban development shown on the land use plan would have adequate sewage disposal facilities. Conversely, one of the considerations in determining the need for public sewers in 1990 was new development indicated in alternative land use proposals. The land use plan also considers regulation of sewage disposal as a type of development control (see Part Four).

The major topics covered in the sewerage facility plan are similar to those in the water plan: present extent of public systems, future requirements, short range and long range plans, cost estimates, and implementation. The plan calls for regionalization of services, growth of existing systems, development of new systems and expansion and construction of sewage treatment plants.

The state Department of Health, the Blackstone Valley Sewer District Commission, and the municipalities share the responsibility of providing sewerage facilities. In 1965, 58 percent of the state's population was served by public sewer systems, although not all facilities were adequate. Five cities had virtually all of their population served: Central Falls, Newport, Pawtucket, Providence, and Woonsocket. Nineteen towns had no public sewer service at all; the remaining fifteen had limited service. Future growth of public sewer systems is expected to occur at a faster rate, considering such factors as continuously expanding development, new water pollution control legislation, and increased federal-state financing. According to the sewer plan, the first stage of development, by 1975, would provide facilities for approximately 73 percent of the projected state population. By 1990, public sewers would be available to 84 percent of projected state population.

The state sewerage facility plan is currently being updated; it will be completed during 1973. This version will differ

Rhode Island Statewide Planning Program, Plan for Public Sewerage Facility Development, Report Number 11 (Providence, Rhode Island: 1969).

from the earlier plan in that it will contain more detailed technical information, such as descriptions of existing sewer systems and current information on "point" sources of pollution. Proposals will be developed for all communities in which a need for sewer service is expected by 1990. Recommendations will be based on existing engineering reports, on recommendations of the state Health Dépârtment, and on anticipated development as shown in the state land use plan. The sewer plan, like the water plan, will be aimed at achieving the goals and policies of the land use plan.

2. Transportation Plans

a. Transit Plan

The state transit plan was adopted in 1969. 13 Although it preceded the land use plan, it was based on the same goals and policies and on many of the same assumptions and projections. Some of the recommendations in the transit plan are included in a proposal for implementing the land use plan. When the transit plan is updated, its recommendations for route extensions will have to be re-evaluated in view of the new residential development projected in the land use plan.

The planifor public transit service reviews past operations and studies and recommends future programs. The plan most directly concerns the Rhode Island Public Transit Authority, which in 1966 took over the United Transit Company, the largest system in the state. In addition to the Authority, there are four privately owned transit operations which cover various sections of the state.

According to the plan, the major problem of the public transit system remains the difficulty of attracting passengers. It is expected that the automobile will continue to be the principal mode of travel in the state. However, assuming that no new freeway facilities will be constructed within the urban core, significant capacity deficiencies will exist by 1985. The transit plan attempts to bring about improved public transit service. The short-range phase of the plan (to 1975) sets the following objectives: continued modifications of the bus system to incorporate routes

¹³Rhode Island Statewide Planning Program, Rhode Island Transit Plan: Future MASS Transit Services and Facilities (Providence, Rhode Island: 1969).

which private companies could conceivably abandon; increased service to growing suburban areas of the state, or initiation of service in such areas which have not previously been reached; and review of the financial resources of the Transit Authority. For the long range, two major innovations are recommended: introduction of commuter rail service over existing rail lines to connect the southwestern and southeastern parts of the state to downtown Providence and provision of commuter parking facilities on the fringes of the Providence urban area, in conjunction with express shuttle bus service to the central business district.

The recommendations for commuter rail service in the upper Narragansett Bay area are particularly pertinent to development proposals in the land use plan. Any location proposed for a rapid transit station has obvious potential as a focus for intensive residential and commercial development. Accordingly, areas around these locations on the land use plan are designated for residential use at the highest density level ("urban"). It is essential, however, that local land use controls and public utility services be adjusted in order to accommodate very high density development. The density which is justified by a mass transit system (and is needed in order to support such a system) is much higher than now permitted in local zoning ordinances.

b. Highway Plan

In developing and revising the alternative patterns leading up to the preliminary land use plan, the 1990 highway system was a major influencing factor. Each alternative land use pattern studied created a somewhat different demand for highway service. Conversely, every area considered for future growth was analyzed in terms of highway access, again with varying results. One alternative pattern (plan "B") was derived from a particular highway development, Interstate Route 295, and two other alternatives ("D" and "E") were determined partly by the configuration of the future highway system. As with the transit plan, the land use plan and the highway plan are based on the same goals and policies and the same forecasted trends. Also, the 1990 highway system was considered in developing a proposal for implementation of the land use plan.

The major routes in the 1990 highway system have been projected, and this system was accepted as part of the highway guide plan in 1965 by the Federal Highway Administration. Location of the major routes was influenced partly by land use plan alterna-

tives. The highway guide plan is being updated by the Statewide Planning Program in a report which will cover background studies, selection of alternate highway networks, needs and cost estimates, priorities, and necessary financing and legislation. Detailing of the highway plan will make use of current land use data, policies, and plans.

The state has been engaged in an accelerated highway construction program for several years. The interstate system has been completed in the urban areas, and all other sections of the interstate system are either under construction, programmed for construction, or under study. In the other highway systems, however, a considerable amount of mileage requires upgrading due to age and increased traffic volumes. The major problems in implementime the 1990 system will be cost, land acquisition, and updating of connector and feeder routes. Implementation of the highway plan is designed to meet the state's future transportation needs, considered within the framework of the other State Guide Plan elements which provide for transportation facilities: the transit plan and the airport plan.

c. Airport Plan

As described in the preceding section of this report, on land use categories, the state airport system plan was used as a basis for formulating the "airports" category of the land use plan. The state airport system inventory and the recommendations for acquisition were both followed in delineating airport areas in the plan. Airport environs were considered in implementation proposals of the land use plan.

3. Recreation and Historic Preservation Plans

a. Recreation Plan

The state plan for recreation, conservation, and open space, also described in the previous section (under the recreation and the conservation land use categories), is closely integrated with the land use plan. The inventory and proposals of the recreation plan for specific open space areas are incorporated into the land use plan. Many of the goals and policies expressed in the recreation plan are included in the goals and policies statements of the land use plan. A number of the implementation measures described in Part Four of the land use plan are designed to achieve goals and recommendations of the recreation plan.

b. Historic Preservation Plan

A historic preservation plan for Rhode Island has been prepared by the Statewide Planning Program in cooperation with the Rhode Island Historical Preservation Commission. 14 An updated edition is underway. Beyond sharing goals and policies and concern with the environment, the preservation plan is related to the land use plan, although not in a way which can be shown graphically. Areas of historic interest do not appear in the land use plan because there is no "historical" use category as such; any category of use can be historical. For example, a historic village would be shown as "residential"; an old mill complex (if large enough to appear at all), as "industrial". There is a relationship to land use, however, in that certain historic places, such as local historic districts and entries on the National Register of Historic Places in the United States, have a limited amount of legal protection which constitutes a type of land use control. Island municipalities have enacted historic area zoning ordinances (not all have established districts yet), and 115 places in Rhode Island have been entered on the National Register as of July, 1972. Although these historic areas may be used for many different purposes, their modification (or demolition) is subject to special This fact is utilized in the implementation section regulation. of the land use plan (Part Four).

The historic preservation plan for Rhode Island includes a preliminary list of historic places in the state, totaling 585, which will be greatly expanded and revised as the Historical Preservation Commission's statewide survey progresses. Other sections of the plan discuss policy, coordination, problems, and needs. The final section presents the state's short-range and long-range programs for historical preservation. The proposed activities include continuing the statewide survey; assisting local preservation projects, including federally-funded projects; and carrying out special activities such as coordinating state and local efforts and initiating new state preservation programs. The statewide survey will form the basis of other aspects of the program, especially the establishment of a state register of historic places. The material resulting from the survey (maps, individual property forms, and final reports) will be suitable for use in other planning and

¹⁴ Rhode Island Statewide Planning Program and Rhode Island Historical Preservation Commission, <u>Historic Preservation Plan</u>, Report Number 13 (Providence, Rhode Island: 1970).

mapping work done by various state and municipal agencies, including community land use plans, highway corridor studies, urban renewal plans, and conservation and recreation projects.

4. Other Plans

a. National and Regional Plans

National Transportation Needs Study:

During 1972 the federal government requested the states to participate in a National Transportation Needs Study. The study assessed needs and formulated a set of transportation development alternatives, in the form of capital improvement programs to be used as a basis for recommendations to the President and Congress. The Rhode Island portion of the study also served "to provide a multimodal transportation report for state and local use."

The Rhode Island study covered five categories of needs: (1) highway; (2) highway-related; (3) public transportation; (4) airport; and (5) other intercity terminals, related facilities, and equipment. The needs were developed on the basis of the state's socio-economic data and forecasts, Overall Economic Development Plan, transportation guide plan elements and twenty-year multimodal travel forecasts developed by the Statewide Planning Program. The needs were designed so as to be consistent with state and local development goals and policies. Thus the Rhode Island portion of the National Transportation Needs Study is consistent with the land use plan, in that they use the same data, forecasts, recommendations, and goals and policies which relate to transportation.

Southeastern New England Study:

In 1971 the Southeastern New England Water and Related Land Resources Study (SENE Study) was initiated. It was designed as a comprehensive federal-state planning effort, led by the New England River Basins Commission, to:

¹⁵ Rhode Island Statewide Planning Program, Rhode Island Transportation Needs Study 1970-1990, Technical Paper Number 19 (Providence, Rhode Island: 1971), pp. 1 and 10.

^{16 &}lt;u>Ibid.</u>, p.3.

New England River Basins Commission, Southeastern New England
Study of Water and Related Land Resources: Plan of Study
(Boston: 1972), Vol. I, p. 2-1.
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. . . Identify and recommend actions to be taken at all levels of government and by private interests to secure for the people of the region the full range of uses and benefits which may be provided by balanced conservation and development of the region's water and related land resources.

The study area encompasses the Massachusetts coastal drainage area, almost the entire state of Rhode Island, and a small portion of Connecticut, including marine water out to twelve miles. The time frame will be 1980 for short-term recommendations, 1990 for midterm recommendations, and 2020 for suggested long-term issues, goals, and broad recommendations. The study will draw on existing plans and reports.

Major study elements of the SENE Study include the following:
(1) environmental and socio-economic framework, (2) water and related land supply and availability relationships, (3) water and related land needs and action programs (including "land use patterns, allocations, and management"); (4) legal and institutional framework; (5) special studies; and (6) water resource program elements and alternatives. The study element subsection on land use will be developed "working with state and regional planning agencies" and will start with an inventory of state and regional land use plans.

b. State and Local Plans

Several state plans, although not elements of the State Guide Plan, are related to the land use plan. Plans and data developed by the Departments of Labor and Employment Security, the Department of Community Affairs (housing assistance section), and the Rhode Island Development Council were used as inputs to the land use plan. The planning, programming, budgeting system formulated by the Budget Division, Department of Administration, makes use of implementation proposals of the State Guide Plan, including the land use element (see Part Four, on capital improvement programming). The air pollution control plan prepared by the Department of Health was considered in evaluating alternative land use plans (see Part Two), in formulating policies (see Part Three), and in describing

New England River Basins Commission, Southeastern New England Study, Vol. II, p. 10-125.

implementation methods (see Part Four). Coastal resources planning programs of the Coastal Resources Management Council are developed in cooperation with the Statewide Planning Program and by law must be consistent with the State Guide Plan. The Council's interim policy statement is incorporated into the policy statement of the land use plan (Part Three), and coastal development controls are also considered in the implementation section of the land use plan (Part Four). The Rhode Island unique natural areas survey, a statewide study directed by a private organization with federal funds, contributed to the open space recommendations of the land use plan.

At the local level, municipal comprehensive plans, land use plans, recreation plans, zoning ordinances, goals and policies statements, and other documents were utilized in formulating the state land use plan, policies, and implementation proposals.

PART THREE: POLICIES FOR LAND USE

Although the land use plan discussed in Part Two has been designed on the basis of the development goals presented in Part One, a map cannot by itself adequately represent a set of goals. The map is merely an illustration of how land uses might be arranged if certain development policies or courses of action implicit in the statement of goals were carried out. The development policies recommended are therefore as important a component of the land use planning and management process as the map. The policies and the map really represent the same stage in the process: the policies express verbally what the map expresses graphically. Together, the policies and the map bridge the gap between identification of goals and formulation of implementing programs and actions.

The concept of "policies planning" has attracted increased interest recently. Some consider the "policies" approach superior to the traditional method of preparing a map as a land use plan. One reason is that a verbally-expressed policy is more responsive to rapidly changing conditions that a graphically-expressed map. If a goal might be attained through several alternative means, a policy can be worded so as to incorporate all of them, whereas a single map could not; a series of maps would have to be formulated. Another reason is that not all policies can be portrayed graphically. A policies approach is particularly advantageous at the state level, since it allows considerable scope for local jurisdictions within the areawide land use framework. It is also of interest at the federal level, as evidenced by the fact that land use bills now under consideration are termed "national land use policy" acts.

In this study, the value of both the policies approach and the map approach are recognized. The map is retained because it is a helpful visual aid to understanding the policies: it illustrates the effect of a policy on the land areas of the state, and, particularly, the effect of all the policies applied together. Furthermore, because of the grid mapping technique, this map avoids to some extent the drawback of inflexibility. The statement of policies is utilized to complement rather than to substitute for the state land use plan map. The policies clarify and augment what is shown graphically on the map.

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A. POLICY STATEMENT

1. Policies Related to Overall Goals

a. Planning for the Environment

Policy #1:

PREPARE AND MAINTAIN A LAND USE POLICY AND PLAN FOR THE STATE TO SERVE AS A GUIDE FOR PLANNING AND DEVELOPMENT DECISIONS.

Policy #2:

COORDINATE PLANNING OF AND INVESTMENT IN PUBLIC AND PUBLICLY AIDED FACILITIES SO AS TO GUIDE DEVELOPMENT IN ACCORDANCE WITH THE STATE LAND USE POLICY AND PLAN.

Policy #3:

PROVIDE FOR CONFORMITY OF PRIVATE DEVELOPMENT WITH THE RECOMMENDATIONS OF THE STATE LAND USE POLICY AND PLAN.

Policy #4:

FOSTER A SENSE OF IDENTITY AND INDIVIDUALITY IN COMMUNITIES.

- -Capitalize on local features and distinctions.
- -Promote identification with a neighborhood-community-city or town hierarchy.
- -Avoid a uniform "grain" of development.

Policy #5:

STRENGTHEN PROGRAMS FOR PRESERVATION OF SIGNIFICANT HISTORIC PLACES.

- -Establish a state register of historic places.
- -Encourage greater use of historic district zoning.

Policy #6:

PLAN FOR AND DEVELOP WATER RESOURCES IN A COORDINATED AND EFFICIENT MANNER, ON A STATE AND REGIONAL LEVEL.

-Support measures which encourage more efficient use of water.

- -Secure or protect adequate water supply sources.
- -Encourage the organization of combined regional water supply and water pollution control functions.

Policy #7:

TAKE NECESSARY ACTIONS TO REDUCE WATER POLLUTION TO LEVELS SET IN THE STATE'S WATER QUALITY CLASSIFICATION PLAN.

- -Provide public sewer systems and treatment facilities in all intensively developed areas.
- -Provide at least secondary-level treatment; provide tertiary-level where required to bring water quality to state standards.
- -Regionalize treatment facilities.
- -Limit intensive development to areas served by public sewer systems providing adequate treatment.

-Require that:

- 1) Industrial development causing other than domestic waste discharges occur only in sewered areas.
- 2) Recycling of industrial wastes be undertaken wherever possible.
- 3) Pretreatment of industrial wastes be done before discharge to public sewer systemsif necessary.

Policy #8:

SEEK TO REDUCE AIR POLLUTION BY APPROPRIATE LAND USE PLANNING, DISPERSING LOCATION OF BOTH POINT AND AREA SOURCES OF POLLUTION.

- -Locate major pollution sources so as to provide maximum air quality, by enforcing regulations for new sources and by utilizing open areas as buffers.
- -Encourage improved highway design.
- -Support the enforcement of upgraded emission control standards for mobile pollution sources.
- -Consider air quality demands of adjacent states.

-Continuously seek to strengthen enforcement procedures.

-Utilize Health Department data in analyzing existing air pollution levels as they relate to land use plans.

Policy #9:

COMSIDER THE OVERALL DESIGN OR VISUAL APPEARANCE OF THE RHODE ISLAND LANDSCAPE IN PUBLIC DEVELOPMENT PROJECTS, AND EXPLORE METHODS OF DEALING WITH THIS ISSUE IN DEVELOPMENT GENERALLY.

b. Planning for Economic Development

Policy #1:

CONTRIBUTE TO THE STABILIZATION AND REDEVELOPMENT OF DOWNTOWN NEWPORT, PAWTUCKET, PROVIDENCE, WESTERLY, AND WOONSOCKET AS CENTRAL BUSINESS DISTRICTS, BY ASSISTING RENEWAL PROGRAMS AND BY ENCOURAGING THE PROVISION OF SUPPORTING SERVICES SUCH AS PUBLIC TRANSPORTATION, OFF-STREET LOADING AREAS, UTILITIES, AND POLICE AND FIRE PROTECTION. ATTEMPT TO MAINTAIN THE RETAIL BASE OF CENTRAL BUSINESS DISTRICTS WHILE STRENGTHENING THEIR OTHER FUNCTIONS.

Policy #2:

CONSERVE EXISTING REGIONAL SHOPPING CENTERS, COMMERCIAL RECREATION AREAS, AND GENERAL COMMERCIAL AREAS, BY ENCOURAGING THE PROVISION OF SUPPORTING SERVICES, SO AS TO CAPITALIZE ON THEIR IDENTITY AND POTENTIAL.

Policy #3:

CONSERVE DESIRABLE EXISTING INDUSTRIAL AREAS BY ENCOURAGING THE PROVISION OF SUPPORTING SERVICES SUCH AS OFF-STREET PARKING AND LOADING AREAS, TRANSPORTATION, AND UTILITIES.

Policy #4:

RESERVE PRIME INDUSTRIAL SITES THROUGH PROTECTIVE REGULATION OR ACQUISITION, RECOGNIZING THE IMPORTANCE OF SUCH FACTORS AS TOPOGRAPHY AND SOIL CHARACTERISTICS, AVAILABILITY OF PUBLIC UTILITIES (PARTICULARLY WATER AND SEWER SERVICE), ACCESS TO TRANSPORTATION FACILITIES (HIGHWAY, RAIL, AIR, AND PORT), PROXIMITY TO EASILY-POLLUTED WATER BODIES, EXTENT OF NEIGHBORING INCOMPATIBLE USES, AVAILABILITY OF LABOR, AND OTHERS.

Policy #5:

MAKE AVAILABLE FOR INDUSTRIAL DEVELOPMENT SUITABLE SURPLUS GOVERN-MENT LAND WHICH WILL NOT BE NEEDED FOR FUTURE PUBLIC USE.

Policy #6:

PLAN FOR AND ENCOURAGE FIRMS TO LOCATE IN MEDIUM-SIZED INDUSTRIAL PARKS AND AREAS, OF AT LEAST 50 ACRES AND AVERAGING 200 TO 300 ACRES, IN ORDER TO RESPOND TO THE NEEDS OF INDUSTRY FOR LARGE PARCELS, TO FACILITATE MORE EFFICIENT AND ECONOMICAL DEVELOPMENT, TO REDUCE CONFLICTS WITH NEIGHBORING USES, AND TO PROVIDE OPEN SPACE AS A BUFFER OR RESERVE FOR THE FUTURE.

Policy #7:

PROMOTE AND ASSIST THOSE TYPES OF INDUSTRY WHICH ARE MOST SUITABLE FOR, AND POTENTIALLY MOST BENEFICIAL TO, THE STATE IN TERMS OF EMPLOYMENT NEEDS, NEEDS OF FIRMS, AND OTHER DEVELOPMENT GOALS OF THE STATE. THESE INCLUDE "TRADITIONAL" INDUSTRIES (TEXTILES, JEWELRY), "GROWTH" INDUSTRIES (PRINTING, INSTRUMENTS, ELECTRICAL AND NON-ELECTRICAL MACHINERY), "NON-POLLUTING" INDUSTRIES (CORPORATE HEADOUARTERS, CERTAIN LIGHT MANUFACTURING, ASSEMBLY, RESEARCH AND ENGINEERING), INDUSTRIES WHICH TAKE ADVANTAGE OF RHODE ISLAND'S UNIOUE ASSETS (OCEANOGRAPHIC RESEARCH, COMMERCIAL FISHING, TOURISM, TRANSPORTATION), INDUSTRIES WHICH SUPPORT THE ABOVE INDUSTRIES, AND OTHER INDUSTRIES WHICH DIVERSIFY THE STATE'S ECONOMIC BASE.

Policy #8:

PROMOTE DEVELOPMENT CONTROLS AND PERFORMANCE STANDARDS FOR COM-MERCIAL AND INDUSTRIAL DEVELOPMENT, SO AS TO IMPROVE DESIGN OF IN-DUSTRIAL PLANTS AND AREAS AND COMMERCIAL BUILDINGS AND DISTRICTS AND SO AS TO REDUCE CONFLICTS WITH OTHER LAND USES AND ACTIVITIES.

Policy #9:

PROVIDE TWO BASIC SERVICES NECESSARY TO INDUSTRY: TRANSPORTATION SYSTEMS AND UTILITIES.

Policy #10:

MAINTAIN AND UPGRADE NECESSARY NATURAL RESOURCES FOR INDIVIDUAL INDUSTRIES, SUCH AS TIDAL MARSHES FOR COMMERCIAL FISHING.

Policy #11:

INTENSIFY RESEARCH ACTIVITIES RELATED TO THE STATE'S ECONOMIC DE-VELOPMENT.

Policy #12:

MAKE FULL AND EFFECTIVE USE OF MANPOWER DEVELOPMENT RESOURCES.

c. Governmental Action

Policy #1:

COORDINATE FEDERAL, REGIONAL, STATE, AND LOCAL DEVELOPMENT POLICIES, PLANS, PROGRAMS, AND PROJECTS WITH EACH OTHER AND WITH THE STATE LAND USE POLICY AND PLAN.

Policy #2:

GIVE STATE GOVERNMENT THE ABILITY TO DEAL WITH LAND USE ISSUES OF STATEWIDE INTEREST, SUCH AS THE BROAD PATTERN OF DEVELOPMENT WHICH IS EMERGING IN THE STATE (E.G., THE EXTENT OF URBANIZATION) AND THE DEVELOPMENT OF AREAS OF CRITICAL INTEREST TO THE STATE IN TERMS OF PUBLIC INVESTMENT OR VALUABLE NATURAL RESOURCES.

Policy #3:

ENCOURAGE AND ASSIST LOCAL GOVERNMENTS TO GUIDE, CONTROL, AND PROVIDE FOR URBAN GROWTH UTILIZING NEW REGULATORY TECHNIQUES WHERE DESIRABLE, WITHIN THE FRAMEWORK OF THE STATE GUIDE PLAN.

Policy #4:

STUDY, ENCOURAGE, AND IMPLEMENT FISCAL REFORMS, INCLUDING REDUCED RELIANCE ON THE LOCAL PROPERTY TAX, WHICH COMPLEMENT THE STATE'S LAND USE POLICY AND PLAN.

2. Policies Related to Goals for Specific Geographic or Policy Areas

a. Urban Growth

Policy #1:

ENCOURAGE PROGRAMS TO UPGRADE EXISTING STABLE URBAN AREAS.

Policy #2:

ENCOURAGE AND COORDINATE CONSTRUCTION OF HOUSING IN PATTERNS CONSISTENT WITH THE STATE LAND USE PLAN: NEAR EXISTING HOUSING CONCENTRATIONS, IN URBAN CORRIDORS RADIATING FROM THE PROVIDENCE CORE, AND NEAR OUTLYING SMALL COMMUNITIES SURROUNDED BY OPEN SPACE.

Policy #3:

IN PLANNING DEVELOPMENT, ATTEMPT TO RELATE HOUSING AND PLACES OF EMPLOYMENT SO AS TO REDUCE TRAVEL TIME BETWEEN HOME AND WORK; ATTEMPT TO ARRANGE AND CLUSTER DEVELOPMENT SO AS TO REDUCE TRAVEL DEMAND.

Policy #4:

UTILIZE OPEN SPACE TO CONTROL AND SHAPE URBAN GROWTH IN PATTERNS SHOWN IN THE STATE LAND USE PLAN.

Policy #5:

LOCATE PUBLIC WATER AND SEWER FACILITIES SO AS TO SHAPE DEVELOPMENT IN ACCORDANCE WITH THE STATE LAND USE PLAN.

Policy #6:

SUPPORT EFFORTS TO PROVIDE A RANGE OF HOUSING CHOICE THROUGHOUT THE STATE, SO THAT COMMUNITIES OFFER A VARIETY.

Policy #7:

ASSIST COMMUNITIES IN PROVIDING LOW AND MODERATE-INCOME PUBLIC AND PUBLICLY ASSISTED HOUSING IN THE STATE ACCORDING TO HOUSING NEEDS.

Policy #8:

PROMOTE CLUSTER ZONING, DEDICATION OF OPEN SPACE AND OTHER PUBLIC AREAS, PIANNED UNIT DEVELOPMENTS, MODIFIED "NEW COMMUNITIES," AND OTHER COMPACT, LARGE-SCALE, AND INNOVATIVE DEVELOPMENT PATTERNS.

Policy #9:

PROMOTE THE ESTABLISHMENT OF HIGHER RESIDENTIAL DENSITIES AND SMALLER LOT FRONTAGES IN URBAN AND SUBURBAN AREAS WHERE PUBLIC WATER AND SEWER SERVICE IS PRESENT OR LIKELY TO BE PROVIDED; PROMOTE LOWER DENSITIES AND LARGER FRONTAGES WHERE PUBLIC UTILITIES ARE UNLIKELY TO BE PROVIDED.

Policy #10:

IN DEVELOPMENTS WHICH ARE OF AN INTENSITY TO SUPPORT PUBLIC WATER AND SEWER FACILITIES, COORDINATE DEVELOPMENT WITH PROVISION OF FACILITIES SO AS TO ASSURE AVAILABILITY OF THESE FACILITIES AT THE TIME THE AREA IS DEVELOPED.

Policy #11:

INTEGRATE THE PLANNING, INSTALLATION, AND OPERATION OF PUBLIC WATER AND SEWER SYSTEMS.

Policy #12:

MINIMIZE EXTENSIONS OF WATER AND SEWER SYSTEMS, CONSISTENT WITH GOALS TO REDUCE EXISTING POLLUTION, IN ORDER TO DISCOURAGE "URBAN SPRAWL."

Policy #13:

UTILIZE HISTORICAL SURVEY AND PLANNING PROGRAMS TO EMPHASIZE AND PRESERVE THE IDENTITY OF HISTORIC NEIGHBORHOODS AND COMMUNITIES.

Policy #14:

ENCOURAGE BETTER PLANNING AND CONTROL OF COMMERCIAL DEVELOPMENT, AIMED AT LIMITING SPRAWL, IMPROVING DESIGN, REDUCING CONFLICT WITH OTHER USES, AND ELIMINATING TRAFFIC HAZARDS.

Policy #15:

PROMOTE CONCENTRATIONS OF HIGH-DENSITY HOUSING (APARTMENTS AND TOWN HOUSES) NEAR LOCATIONS OF PROPOSED RAPID TRANSIT STATIONS.

b. Open Space 19

Policy #1:

PLAN FOR RECREATION, CONSERVATION AND OPEN SPACE "WITHIN THE FRAME-WORK OF COMPREHENSIVE PLANNING FOR THE ENTIRE STATE."

Policy #2:

UTILIZE OPEN SPACE TO SHAPE URBAN GROWTH IN ACCORDANCE WITH THE STATE LAND USE PLAN, ACQUIRING AREAS IN FEE OR THROUGH EASEMENTS AROUND CONCENTRATIONS OF DEVELOPMENT (BOTH THE METROPOLITAN AREA AND OUTLYING CENTERS), IN CORRIDORS RADIATING FROM THE URBAN CORE, AND IN THE WESTERN PART OF THE STATE.

Policy #3:

ACQUIRE AND DEVELOP REGIONAL PUBLIC RECREATION AREAS IN A VARIETY OF LOCATIONS THROUGHOUT THE STATE, IN ORDER TO IMPROVE ACCESS AND TO FLACE A BALANCED LOAD ON THE TRANSPORTATION SYSTEM DURING PEAK PERIODS OF USE.

Policy #4:

CONDUCT FREQUENT STUDIES OF RECREATION DEMAND AND USAGE.

Policy #5:

ENHANCE THE NATURAL QUALITIES OF PUBLIC OPEN SPACE AREAS BY PROPER PLANNING, DEVELOPMENT, MAINTENANCE, AND POLICING.

Policy #6:

MAKE PUBLIC OPEN SPACE ACCESSIBLE TO THE PUBLIC IN DEGREES APPROPRIATE TO ITS PURPOSE AND ITS TOLERANCE FOR USE.

Policy #7:

IMPROVE ACCESS TO ALL TYPES OF RECREATION FACILITIES.

Many of the "open space" policies are based on statements of policy in the state's current recreation plan (Rhode Island Statewide Planning Program and Rhode Island Department of Natural Resources, Plan for Recreation, Conservation and Open Space, Report Number 14, pp. 25-27). Quotations in this section refer to this plan.

Policy #8:

ACQUIRE ADDITIONAL SITES ON (OR EASEMENTS, RIGHTS, OR ACCESS TO) SALT AND FRESH WATER BODIES, FOR FISHING, BOAT LAUNCHING, SWIMMING, SURFING, AND OTHER RECREATIONAL USES.

Policy #9:

LIMIT OWNERS' LIABILITY, SO AS TO ENCOURAGE OPENING PRIVATE LANDS TO PUBLIC USE.

Policy #10:

MAKE MULTIPLE USE OF WATER BODIES AND WATERSHEDS FOR RECREATION AND OTHER PURPOSES WHEREVER POSSIBLE, CONSISTENT WITH OTHER GOALS.

Policy #11:

DEVELOP INTENSIVE-USE RECREATION FACILITIES AND PROGRAMS IN LOCATIONS AROUND THE METROPOLITAN AREA.

Policy #12:

ACQUIRE AND DEVELOP "MAJOR REGIONAL MULTI-USE ACTIVE AND PASSIVE RECREATION AREAS" AND "EXTENSIVE-USE MANAGEMENT AREAS" TO COMPLE-MENT LOCAL FACILITIES.

Policy #13:

AUGMENT THE SYSTEM OF RECREATIONAL TRAILS BY ACQUISITION OF FEE OR EASEMENTS.

Policy #14:

"DEVELOP SCENIC HIGHWAYS WHICH ARE DESIGNED TO PROVIDE ACCESS TO RECREATION FACILITIES, SCENIC ATTRACTIONS, AND OTHER AREAS OF INTEREST, FACILITATE PLEASURE DRIVING, AND PROMOTE TOURISM, WITHOUT DETRACTING FROM SCENIC VALUES OR EXISTING OUTDOOR RECREATION FACILITIES," AND WITHOUT "DAMAGING NATURAL RESOURCES."

Policy #15:

"TAKE ACTION TO PROTECT AND MAINTAIN THE BEST OF (THE STATE'S)
NATURAL FEATURES, SUCH AS UPLAND WETLANDS, COASTAL MARSHLANDS, DISTINCTIVE TOPOGRAPHIC FEATURES, FLOOD PLAINS," SAND DUNES AND
BLUFFS, SAND BEACHES, IMPORTANT WILDLIFE HABITATS, AND OTHER UNIQUE
OR SIGNIFICANT NATURAL AREAS.

Policy #16:

DEVELOP PROGRAMS FOR PROTECTION OF HISTORIC ARCHAEOLOGICAL SITES.

Policy #17:

INTENSIFY RESEARCH ACTIVITIES RELATED TO THE STATE'S NATURAL RESOURCES.

Policy #18:

CONTROL PLANT AND WILDLIFE DISEASE.

Policy #19:

ENFORCE CONTROLS OVER THE USE OF PESTICIDES.

Policy #20:

IDENTIFY AND PROTECT THE STATE'S HIGHEST-QUALITY OPEN SPACE AREAS.

Policy #21:

ACQUIRE DEVELOPMENT EASEMENTS PERMITTING CONTINUED AGRICULTURAL AND OPEN SPACE USES.

Policy #22:

ADOPT TAX POLICIES FAVORING CONTINUED AGRICULTURAL AND OPEN SPACE USES, SUCH AS PAYMENTS TO MUNICIPALITIES IN LIEU OF PROPERTY TAXES.

Policy #23:

STRENGTHEN RURAL AND LOW-DENSITY ZONING PROCEDURES.

c. Older Central Cities

Policy #1:

STIMULATE INDUSTRIAL AND COMMERCIAL INTEREST IN CENTRAL CITIES, THROUGH PROMOTION, FINANCIAL ASSISTANCE, AND PROVISION OF PUBLIC FACILITIES.

Policy #2:

ENCOURAGE AND ASSIST REDEVELOPMENT, REHABILITATION, AND CONSERVATION PROGRAMS WHICH:

- 1. Incorporate both social and physical renewal;
- 2. Prevent further concentration or segregation of the poor and the disadvantaged;
- 3. Correctly assess historic areas; and
- 4. Ameliorate land use conflicts and convert areas from inappropriate to appropriate land uses.

Policy #3:

SUPPORT EFFECTIVE PROGRAMS TO IMPROVE THE QUALITY AND BROADEN THE CHOICE OF HOUSING FOR LOW AND MODERATE INCOME FAMILIES.

- -Encourage programs which directly assist low-income families to support adequate housing through income maintenance, rather than programs of indirect assistance which benefit intermediaries at public expense while aiding low-income families at third or fourth-hand or not at all.
- -Promote research and improve design and construction techniques to reduce housing costs.
- -Strengthen the enforcement of building and housing codes, and make requirements more flexible.
- -Encourage zoning and subdivision laws which eliminate involuntary housing ghettos.
- -Plan housing locations convenient to other activities.

Policy #4:

ASSIST CENTRAL CITIES TO DEVELOP AS CULTURAL, ENTERTAINMENT, AND COMMUNICATIONS CENTERS, BY ENHANCING SUPPORTING SERVICES.

d. Shore Region²⁰

Policy #1:

"DEVELOP RESOURCE MANAGEMENT PLANS" FOR THE SHORE REGION WHICH ARE "COMPATIBLE WITH THE NEEDS OF THE PEOPLE OF RHODE ISLAND, WHILE PRESERVING AND ENHANCING AS FAR AS POSSIBLE THE NATURAL QUALITIES OF THE MARINE ENVIRONMENT."

Policy #2:

EXAMINE PROPOSALS FOR CHANGES IN THE COASTAL REGION "IN TERMS OF THEIR ECONOMIC, RECREATIONAL, AESTHETIC AND ENVIRONMENTAL IMPORTANCE TO ALL OF THE PEOPLE OF THE STATE" IN COMMON RATHER THAN TO INDIVIDUAL COMMUNITIES OR "SMALL, SPECIAL INTEREST GROUPS."

- -Require applicants for changes or special privileges to consider:
 - "1. The effects. . . on the marine environment.
 - "2. The effects. . . on other important activities.
 - "3. The compatibility of their proposed activities with. . . state and local management plans."
- -"Emphasize those values of the coastal region which enhance the total quality of life to our citizens."
- -"Encourage programs and proposals for management and use of our coastal resources which provide for activities such as:
 - "1. Increased public access to the shore.
 - "2. Increased public use of water bodies. . .
 - "3. Preservation of those areas essential to fish and wildlife propagation, and of the open spaces needed to provide variety to the landscape.

²⁰Many of the "shore region" policies are based on the statement of interim policy guidelines adopted by the state Coastal Resources Management Council on April 11, 1972. Quotations in this section refer to the Council's statement.

- "4. Residential and recreational development in a form which makes the best use of scarce shorelines, which does not interfere with the public right of access to the shore, and which does not damage important natural areas of scenic vistas.
- "5. Pleasure boating facilities which do not destroy important natural areas or contribute to pollution.
- "6. Attractive tourist. . . facilities which . . . do not degrade the coastal region."
- -Recognize "the values of the coastal region for commercial development, and the need for expanded and improved sources of employmentfor our citizens."
- -Give "full consideration" to those "forms of commercial activity . . . which are obviously appropriate uses of the coastal region."
- -"In general, . . . give priority to those types of commercial development which are primarily oriented to the coastal region or which have special characteristics requiring a site in this region."

Policy #3:

SUPPORT "PROGRAMS TO ABATE POLLUTION" AND "EXAMINE ALL PROPOSALS FOR USE OF THE STATE'S MARINE RESOURCES IN RELATION TO THE DEGREE OF POLLUTION WHICH MAY RESULT."

- -"Support and encourage efforts to prevent and control oil spills and other accidental spills of contaminants."
- -Support efforts to maintain and improve the state's current water quality standards and, "beyond this goal, to achieve a minimum quality of SB . . . in any coastal waters."
- -Encourage "studies to determine potential effects" of "thermal changes in the state's salt water areas caused by power generating plants, both fossil fuel and nuclear, . . . before the fact rather than after changes occur."
- -"Require continued monitoring (of power plants) to detect and minimize damage to marine life; . . . require the utilities to take corrective action when necessary; (and require) . . . that expenses involved. . . to be met by the applicant."

Policy #4:

"ENCOURAGE DEVELOPMENT OF BOTH SPORT AND COMMERCIAL FISHERIES BOTH INSHORE AND OFFSHORE UP TO LEVELS OF MAXIMUM SUSTAINABLE YIELD PROVIDING SUCH DEVELOPMENT DOES NOT CURTAIL OTHER MORE IMPORTANT USES."

Policy #5:

"DEVELOP MANAGEMENT REGULATIONS FOR SAND AND GRAVEL AND MINERAL EXTRACTION" SO AS NOT TO "PREVENT OTHER USES OR DAMAGE MARINE LIFE."

Policy #6:

PREVENT FILLING OF COASTAL WATERS AND WETLANDS EXCEPT WHEN NECESSARY TO THE HEALTH OR WELFARE OF THE PEOPLE OF THE STATE, AND THERE IS NO OTHER ALTERNATIVE

Policy #7:

PROTECT SELECTED AREAS FROM THE EFFECTS OF FLOODING AND EXTREME TIDAL ACTION; LIMIT THE INTENSITY OF DEVELOPMENT OF UNPROTECTED AREAS.

- -Carefully control development of areas subject to flooding.
- -Prevent blockage or restriction of natural drainage channels.
- -Reduce the effects of shoreline erosion.

Policy #8:

"COOPERATE WITH LOCAL GOVERNMENTS IN ALL MATTERS OF MUTUAL INTEREST"
AND ENCOURAGE THEM TO MAKE FULL USE OF THEIR JURISDICTION.

- -"Involve local governments in . . . studies and plans before these are completed and adopted and solicit and consider the opinion of local officials on any matter . . . which significantly affects any community."
- -"Consult the local government concerned" in a coastal management matter, and consider "all information made available by that local government . . . before making a decision."

Policy #9:

EXTEND "THE JURISDICTION OF THE STATE OVER OFFSHORE WATERS TO THE MAXIMUM EXTENT POSSIBLE AND (WORK) . . . CLOSELY WITH THE FEDERAL GOVERNMENT TO INSURE THAT FEDERAL AGENCIES EXERCISE THEIR AUTHORITY IN A MANNER CONSISTENT WITH THE INTERESTS OF RHODE ISLAND."

e. Transportation

Policy #1:

UPGRADE EXISTING TRANSPORTATION FACILITIES WHICH ARE SUBSTANDARD.

Policy #2:

IMPROVE TRANSPORTATION TERMINAL FACILITIES.

Policy #3:

ENACT AND ENFORCE NECESSARY SAFETY MEASURES.

Policy #4:

SEPARATE MOVEMENTS BY FUNCTIONAL TYPES.

Policy #5:

PLAN TRANSPORTATION FACILITIES AS CONTRIBUTING PARTS OF AN OVERALL STATEWIDE MULTI-MODE TRANSPORTATION SYSTEM WITHIN A REGIONAL SETTING.

Policy #6:

PLAN TRANSPORTATION SYSTEMS SO AS TO SHAPE AND SERVE DEVELOPMENT IN ACCORDANCE WITH THE STATE LAND USE PLAN, RECOGNIZING IN TURN THAT TRANSPORTATION REQUIREMENTS SHOULD BE CONSIDERED IN DETERMINING THE SPATIAL ARRANGEMENTS OF LAND USES.

Policy #7:

UTILIZE MASS TRANSIT TO REDUCE TRANSPORTATION BARRIERS TO EMPLOYMENT.

Policy #8:

CONSIDER PROPOSALS FOR LARGE-SCALE PLANNED-UNIT DEVELOPMENTS IN TERMS OF REQUIREMENTS AND POTENTIALS FOR TRANSPORTATION SYSTEMS.

Policy #9:

INCORPORATE ENVIRONMENTAL, HISTORICAL, AND OTHER PERTINENT TYPES OF SURVEYS IN THE TRANSPORTATION PLANNING PROCESS.

Policy #10:

RELATE THE DESIGN AND LOCATION OF TRANSPORTATION FACILITIES VISUALLY TO THE NATURAL AND CULTURAL LANDSCAPE.

Policy #11:

PROMOTE AND SUPPORT HIGHWAY BEAUTIFICATION PROGRAMS.

Policy #12:

DEVELOP PROGRAMS, IN COOPERATION WITH MUNICIPALITIES, TO DEAL WITH ENVIRONMENTAL PROBLEMS NEAR TRANSPORTATION FACILITIES.

Policy #13:

ACQUIRE TRANSPORTATION RIGHTS-OF-WAY AS THEY BECOME AVAILABLE; PRO-VIDE FOR MULTIPLE USE OF RIGHTS-OF-WAY WHERE FEASIBLE.

Policy #14:

PROMOTE USE OF MASS TRANSIT IN HEAVY TRAVEL CORRIDORS BY MAKING EXISTING SERVICE MORE COMPETITIVE AND INTRODUCING NEW TYPES OF SERVICE.

Policy #15:

EXPAND AND IMPROVE PUBLIC TRANSPORTATION SERVICES, INCLUDING HIGH-SPEED RAIL, BETWEEN METROPOLITAN AREAS IN THE NORTHEAST CORRIDOR.

Policy #16:

MAINTAIN AND IMPROVE RAIL FREIGHT SERVICE TO SUPPORT INDUSTRIAL DE-VELOPMENT.

Policy #17:

COMPLETE THE BASIC HIGHWAY NETWORK RECOMMENDED IN THE HIGHWAY ELEMENT OF THE STATE GUIDE PLAN.

Policy #18:

SPACE HIGHWAY INTERCHANGES PROPERLY IN BUILT-UP AREAS SO AS TO REDUCE CONGESTION YET IMPROVE ACCESS.

Policy #19:

CONTROL DEVELOPMENT AT HIGHWAY INTERCHANGES.

B. RELATIONSHIP TO NATIONAL LAND USE POLICY

The federal government has long been involved in activities which reflect land use policies, and it is now moving toward the development of a coherent "national land use policy."

1. Federal Activities Reflecting Land Use Policy

There are many federal activities which, while they are not conducted according to an explicit land use policy, do in effect comprise a land use policy, provide a mechanism for implementing land use policy, or follow another type of policy which directly affects land use. For example, such activities as urban renewal, new community development, and economic development assistance to depressed areas all comprise land use policies to stimulate the growth of different types of urban areas. Such activities as large-scale national projects (the interstate highway system, parks), location of government facilities, and government investment in certain industries through procurement contracts all provide mechanisms for carrying out land use policies, although they may be aimed at other purposes. 21

In addition, many federal programs operate on the basis of administrative or legislative policies which are closely related to land use. Examples are transportation, energy, air and water pollution control, water resources, agriculture, open space, housing, and, on a broader scale, fiscal operations.

The relationships of the state's land use policies to these types of federal policies are complex and are sometimes obscure, but the relationships do exist. Many state policies are derived from or rely upon federal policy, such as that expressed in urban renewal programs and water quality management efforts. Often, the federal policy is modified or given certain emphasis so as to apply to this state's particular needs or characteristics. The trend has been that state policy details and amplifies federal policy, following broad declarations of purpose at the federal level with specific policies and actions. A federal policy may sometimes

²¹Herman D. Ruth, "Elements of a National Policy for Land Use," <u>Planning 1971</u> (Chicago, Illinois: American Society of Planning Officials, 1971), p. 290.

conflict with state policy, or may have no parallel in state policy, but even in these cases the differences are often recognized in that attempts are made to resolve them.

2. Development of a National Land Use Policy

Until recently, the only explicit involvement of the federal government with land use was its support of regional, state, and local land use planning, through the "701" planning assistance program. Also, several national studies were directed toward problems of "growth," defined either synonymously with land use or as a larger issue encompassing land use. These studies culminated in the enactment of the Urban Growth and New Community Development Act of 1970, in which the federal government declared its intention to:22

growth policy and to encourage the rational urban growth policy and to encourage the rational, orderly, efficient, and economic growth, development, and redevelopment of our States, metropolitan areas, cities, countries, towns, and communities in predominantly rural areas which demonstrate a special potential for accelerated growth; to encourage the prudent use and conservation of our natural resources; and to encourage and support development which will assure our communities of adequate tax bases, community services, job opportunities, and well-balanced neighborhoods in socially, economically, and physically attractive living environments.

Although this legislation approaches the formulation of a land use policy, it is now proposed that an explicit policy dealing with land use be established. A number of bills to this effect have been introduced in Congress (in 1972, a bill passed the Senate). According to the latest version considered in 1972, the national policy would consist of assisting states to plan and regulate land use in certain critical areas and to act on land use issues of more than local significance. The emphasis in the bill is on implementation and performance guidelines for the states rather than on substantive policy; the intent is to assure that

^{22&}quot;Urban Growth and New Community Development Act of 1970," Title VII-Housing and Urban Development Act of 1970, Public Law 91-609, 84 Stat. 1770.

states recognize the land use problems listed in the legislation and have the authority to implement appropriate land use programs. The national land use policy bill focuses on several types of areas to be included within the scope of state land use plans and programs. These are: (1) areas of critical environmental concern, (2) key public facilities, (3) development and land use of regional benefit, and (4) new communities and other large-scale development.

The state land use policies in the preceding statement are in harmony with this "national land use policy," since the basic concept of both is to strengthen the state role in land use planning and management. The state policies express a greater state interest in land use, and they reflect the intention of the state to control certain areas and to guide certain types of development in particular, as envisioned in the national land use policy bills.

PART FOUR: IMPLEMENTATION OF THE STATE LAND USE POLICIES AND PLAN

The state land use goals and policies expressed in Parts One and Three set forth clear guidelines for the physical development of Rhode Island through the year 1990. The state land use plan described in Part Two sets forth an allocation of land areas which reflects these goals and policies. The purpose of Part Four is to explore methods which may be used to achieve the implementation of the state development policies and plan. The state should take the lead in developing the framework of legislation, coordination, and programs into which each community can fit its own particular development goals and actions. Some potential implementation measures are already in effect, some are still being developed from proposals into active programs, and others have yet to be proposed in this state.

A. EXISTING LAWS AND PROGRAMS

The major components of the state's current role in land use control are highlighted in chart form in Table 3.

Overview

Rhode Island presently has no unified or coordinated program for statewide control of land use. However, land use is controlled to a limited extent by the state government in a variety of ways.

One direct and extreme form of land use "control" available to state government is its power to acquire land (by purchase, condemnation, or other means) for certain purposes, including recreation, transportation, water supply, and others. Acquisition is the state's most effective method of controlling land use. Since it is also the most expensive, its use is limited: it now applies to only about eight percent of the total land area of the state.

Development controls which are more broad in scope are two important state resources programs: the freshowater wetlands act and the coastal resources managment act, both passed in 1971. The fresh water wetlands act requires an owner to apply for state approval to alter a fresh water wetland. Local approval is also required. The state's decision is to be based on a wetlands' value in terms of flood control, ground water supply, wildlife habitat, and recreation. The coastal resources management act requires state approval, following local approval, of uses or activities in the state's salt water areas and of six specific uses or activities on land related to salt water areas. Standards for decision-making are (1) conflict with coastal resources management plans or programs and (2) damage to the coastal environment. (A related program is the state coastal wetlands act, which was passed in 1965 but never implemented. It would provide for state zoning of intertidal salt marshes and contiguous uplands.)

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Table 3.	Water Kesources	Transportation	Public Utilities	Publ. Rights-of-Wav	Historical Pres.	Health	Development Council	Community Affairs	Coastal Res.	V.	Statewide_Pl	ruo
STATE INVOLVEMENT IN LAND USE CONTROL	Ke	por	C	RI)T1C	Þ	opm	mit	al	V. Sewer Dist. Com.	Statewide_Planning	Lubric Stage
State Agencies:	Inos	tati	1111	ehts	al P		ent	y Af	Res.	er D	ide	. <u> </u>
	ces	on	tie	-of-	Pres.		Cou	1	Mn	ist	ر Plai	100
	Bd.		Goum.	Wav	6		ncil	S	Mngmt.	င္ပ	Commin	10.14
			E	Comm.	Conm.				Cncl.	um.	ţo.	
Land Uses, Activities or Areas									1.			
•					P R			P	P		P	
Flood prone areas	P	+	H		P	+	-	P	М	+	P	+
Fresh water wetlands					MI R							
	T			T	P M			P	P M		P	
Coastal wetlands & salt marshes	-	igert			R P	\perp	$oldsymbol{\perp}$	P	R		P	+
					M				М			
Shoreline protection facilities & features	\dashv	┢	1 1	P :	R P	╁	\vdash	P	R P		P	t
Public tidewaters & shoreline					R				M R			
Significant natural areas					P M				P M		P	
			П	•	P M			P	Р М		P	T
Wildlife habitats			\sqcup		R P	_	_	P		\dashv	P	ļ
Farm land		Ļ		1	M P P		Ļ	P		1	P	-
	М	P M	• •	M I	ии		M		M			
Recreation & conservation areas	R		\vdash		R P P	-	P	P	R	\dagger	P	-
Historic properties & districts	-	-	H	+	M M	-	-	P	H	+	P	M
Subdivision, housing & redevelopment	+	L	-	+	_	R	_	P		+	P	H
Air pollution sources	1			+	1	R	D	P	R	<u> </u>	P	Ŀ
							М					
Industrial & commercial uses	+	-		+	\dagger	R	P	\vdash	P	+	P	
Chemical & petroleum facilities	+	\vdash	+	+	+	R	P	Н	R P	+1	? P	-
Power & desalination plants	+	H	R	+	P	R	P		R P	+	P	\vdash
Mineral extraction (coastal)			R		R		Ш		R			L
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Table 3 (Continued)	Water Resources Bd.	ortation	c Utilities Con	Publ. Rights-of-Way Comm.	10	Health	15	ty Aff	tal Res. Mngr	ewer Dis	Atomic Energy Comm. A	Statewide Planning	Administration: Public Bldgs. Div.	
Communications, power, & fuel lines		R	R		L	R			R					_
	P			I		P		P				P		
Water supply systems	M R		R	I F		R							•	
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Sewage treatment & disposal	-			_	1	R P	_	-	R	R	_			_
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Solid waste disposal						R								
		P			Π			P	P			P		_
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		М												
Highway environs		R	4	\bot				_		_	_			_
		P						P				P		
Airport environs		R	\perp						_[_
				.,	-		-							

NOTES TO TABLE 3

State Agencies

Full names of agencies listed:

Department of Administration: Public Buildings Division, Statewide Planning Program; Atomic Energy Commission; Blackstone Valley Sewer District Commission; Coastal Resources Management Council; Department of Community Affairs; Development Council; Department of Health; Historical Preservation Commission; Department of Natural Resources; Commission on the Discovery and Utilization of Public Rights-of-Way; Public Utilities Commission; Department of Transportation; Water Resources Board.

Except for Public Buildings and Statewide Planning, agencies are listed at the department rather than the division level.

Information given for a certain agency may apply to a closely associated agency not listed; e.g., for the Development Council, to the Industrial and Recreational Building Authorites; for the Public Utilities Commission, to the Public Utilities Division in the Department of Business Regulation; for the Department of Transportation, to the Public Transit Authority.

Land Uses, Activities, or Areas

The items listed under "Land Uses" are not all comparable; some are types of physical features whose locations in the state can be mapped, and others are types of activities which can occur in many locations. The list is merely intended to touch upon many land uses of interest, not to categorize land uses definitively.

Involvement (letter symbols)

Letter symbols indicate type of agency involvement, as follows:

P - Planning, studying, surveying, coordinating

M - Managing, operating, maintaining, constructing or developing

R - Regulating, issuing permits

The type of involvement may be authorized for an agency but not currently exercised; e.g., the Historical Preservation Commission is authorized to acquire and maintain property but does not carry out this function except to hold title temporarily when a federal acquisition grant is made to a property in the state.

The type of involvement may be limited; e.g., the Coastal Resources Management Council obviously is involved only where a land use may affect a coastal resource; the Atomic Energy Commission, only where atomic industrial development is concerned.

Since this table is intended to <u>highlight</u> <u>major</u> roles of the state in land use control, it is not all-inclusive. Many elements are absent, such as for advisory or <u>ad hoc</u> agencies, for very specialized types of programs, or for activities which are indirectly related to land use.

Other types of state development controls are regulatory in nature. In the interests of public health, the state regulates water pollution and air pollution, by requiring permits for facilities which may violate air and water quality standards. The state also regulates public utilities such as railroad, common carrier, gas, electric, water, telephone, telegraph, and pipeline companies. These state powers, although not designed as land use controls, can have a strong influence on land use and development.

Several other state programs have an indirect influence on land use, but through operating rather than regulatory activities. In this group are the industrial and recreational building programs; highway beautification; the public rights-of-way to the shore program; capital improvement programming linked to State Guide Plan recommendations; and evaluation, review, and coordination of federal projects.

The state has also expressed its interest in land use by setting forth enabling legislation for various types of development controls to be exercised at the local level. These involve zoning; subdivision of land; redevelopment; minimum housing standards; official maps; historic area zoning; airport zoning; and tax relief for farm, forest, and open space land. (The latter, although a tax policy, closely affects land use.) From a broad point of view, a large number of other laws and programs may be said to influence land use: agriculture and forestry laws, fish and game regulation, public works projects, housing-related activities, tax and spending programs, and so forth down a long list. The following brief review is limited to those laws and programs which most directly control land use and which, although fragmented, may be used in thir present form as tools for implementing various aspects of the land use plan.

1. State Acquisition of Land

The most direct form of land use control available to government units is acquisition, whether by condemnation, purchase, or other means. In the General Laws, the basis for acquisition of land is found in Chapter 37-6. The head of any state agency is authorized to acquire land or other property for public use if he considers it "necessary or advantageous to the establishment, acquisition, construction, development, betterment or maintenance of any governmental facility, public work or public improvement." This power is limited by the availability of appropriations and by the review authority of the State Properties Committee (or by the Governor, in some cases). Chapter 37-7 sets forth procedures for the management and disposal of state-owned land.

Acquisition by exercise of the power of eminent domain (condemnation) is a inherent sovereign right of the state which may be limited by the Constitution or by the legislative power. The Rhode Island Constitution has reference to eminent domain in five places.

The General Laws authorize condemnation for a number of specific purposes, such as highways, parks and water supply.

The state's power of acquisition has resulted in substantial impact on its land use pattern. State-owned land amounts to more than 50,000 acres, representing about eight percent of the state's area.23 Most of the state's property is in some form of open space use. Before 1964, most state recreation and conservation land was acquired under two federal programs established by the Pittman-Robertson and Dingell-Johnson acts. In 1964, the "Green Acres Land Acquisition Act" was passed (General Laws, Chapter 32-4), and the state was authorized to issue bonds to carry out the program. As of October, 1972, there had been eleven state acquisition projects, totaling 2,297 acres, and approximately 60 local acquisition projects, totaling 1,654 acres.24

2. Health Regulations and Pollution Control

The state Department of Health is responsible for prevention and control of diseases or conditions detrimental to public health. As set forth in Title 23 ("Health and Safety") and in Chapter 46-12 ("Water Pollution") of the General Laws, some of its regulations may result in a form of land use control. For example, the Department is empowered to set and enforce standards for drinking water supplies, for sewage disposal systems, for air and water quality, and for "salutary environmental health conditions." These standards are a major determinant of the way in which land is developed; a given site can tolerate only certain types and intensities of development and still meet water, sewage disposal, air and water pollution control, and other requirements.

3. Public Utilities Regulation

There are several state agencies which may become involved to some extent with public utilities regulation: the Department of Health, Water Resources Board, Department of Natural Resources, and Coastal Resources Management Council. There are two state commissions, however, which are directly concerned with decisions on public utilities, and therefore also with land use decisions, since utilities companies can have a tremendous potential for environmental impact.

Rhode Island Statewide Planning Program, <u>Inventory of State</u>
Owned Land and Buildings, October, 1972, p. 103.

²⁴ Rhode Island Department of Natural Resources.

The Public Utilities Commission was created in 1969 under Chapter 39-1 of the General Laws. The Commission, and a Division of Public Utilities and Carriers, are given authority to supervise and regulate utilities companies. The Commission is empowered to act as a court of record and can make and enforce orders and judgments. It may also hear appeals from local regulations, ordinances, zoning decisions, and inspectors orders. It is the body which authorizes utilities companies to exercise the power of eminent domain.

The Atomic Energy Commission was established in Chapter 42-27 of the General Laws. It is basically a research and advisory body.

4. Wetlands and Coastal Resources Programs

Several state laws are aimed at protecting wetland and shoreline areas, a major goal of the land use plan.

A state law protecting intertidal salt marshes is found in Chapter 11-46.1 of the <u>General Laws</u>. Penalties are provided for dumping in, excavating, or disturbing the ecology of a salt marsh, unless a permit is obtained from the state Department of Natural Resources. A violator may be required to restore the marsh to its original condition.

The coastal wetlands act (Sections 2-1-13 to 2-1-17 of the General Laws) establishes a public policy to preserve the "purity and integrity" of coastal wetlands. A coastal wetland is defined to include salt marsh bordering on tidal waters and contiguous wetlands up to 50 yards from the marsh. The act, a form of zoning, would operate through exercise of the police power. The Department of Natural Resources would prepare an order designating a coastal wetland and the uses permitted in it. The order would take precedence over local controls. No orders have ever been issued under this act because an owner of a wetland damaged by an order may claim compensation in court. Since funds are not available to pay damages, the state has never taken any action which might result in damage (In Massachusetts, about 23,000 acres of coastal wetlands have been protected under a similar law. That state has not hesitated to issue orders because it may modify or withdraw an order if it is not able to pay damages as set by the court.)

Swamps, marshes, and other fresh water wetlands are protected by a state law which was passed in 1971. The act, also through exercise of the police power, prohibits altering a fresh water wetland without approval of the Department of Natural Resources and of the city or town council. A violator may be ordered to cease, to restore an area, and to pay fines. This act has resulted in an active permit program. This approach and procedures are totally different from the provisions of the coastal wetlands act.

The Department of Natural Resources has several other forms of development control over shoreline and tidewaters. Chapter 46-3 of the General Laws, on shore development, is intended to preserve shore areas from erosion and storm damage through state or local acquisition or through technical assistance to municipalities. Chapter 46-5 authorizes acquisition and construction of port facilities by the state. Chapter 46-6, "Obstructions to Navigation," allows the Department to regulate construction and filling in public tidewaters, through a permit system requiring submission of plans. Fines may be imposed, and unauthorized "encroachments" may be prosecuted as public nuisances. This chapter also provides for the removal of obstructions to navigation, although no funding is available.

An act passed in 1971, appearing in Chapter 46-23 of the General Laws, establishes a state Coastal Resources Management Council. The Council's primary responsibility is the planning and management of the state's coastal resources. The Council may "adopt regulations necessary to implement its resources management programs." It has authority to "approve, modify, set conditions for, or reject the design, location, construction, alteration, and operation" of water uses and activities (up to the mean high water mark) and of six specified land uses and activities where these are related to a water area under the Council's jurisdiction and where "there is a reasonable probability of conflict with a plan or program for resources management or damage to the coastal environment." uses are: (1) power generating and desalination plants; (2) chemical or petroleum processing, transfer, or storage; (3) minerals extraction; (4) shoreline protection facilities and physiographic features; (5) intertidal salt marshes; and (6) sewage treatment and disposal and solid waste disposal facilities. Enforcement methods of the Council are based on the concept that initial decisions relating to coastal resources should remain with the local government or state agency which now makes the decision. The Council reviews initial affirmative decisions and then acts in accordance with its implementing authority as described above. To enforce its decisions, the Council may issue orders, bring about prosecution of violators, and obtain relief in equity or by prerogative writ.

5. Other Resource-Related Programs and Controls

Significant land use decisions affecting natural resources are made by state agencies in other types of programs. Development of public water supply resources falls within the jurisdiction of two state agencies. The Department of Health must approve all sources and treatment works (General Laws, Chapters 46-13 and 46-14). The Water Resources Board (Chapter 46-15) must formulate a "comprehensive" state water resources program. Its duties include reviewing other pertinent state studies; advising local authorities and approving their plans; and developing long-range plans and programs for the state's water supplies. The Board is empowered to acquire property, to construct facilities, and to make loans.

The Department of Natural Resources is involved in many other resources programs, such as those concerned with agriculture, soil conservation, flood control, fish and wildlife management, forests, and trees and plants. The Department also assists local conservation commissions, which are authorized to acquire land.

6. Public Rights-of-Way to the Shore

A legislative commission has been working to identify public rights-of-way to the shore and to make recommendations for their use. The commission has completed an inventory and evaluation, conducted legal searches, and begun marking sites. Plans call for the development of some rights-of-way for recreational use. (The Commission is authorized to acquire and develop land for parking facilities.) This program can contribute to the implementation of land use policies for open space and for the shore area.

7. Tax Relief for Open Space Land

A 1968 law (General Laws, Chapter 44-27) gives tax relief to open space land, thus furthering land use goals for urban growth and for open space. An owner may apply to his local assessor to have his property classified as farm land, forest land, or open space land (forest land must first be so designated by the state Department of Natural Resources). Tax relief consists of having assessors consider no factors in determining the cash value of such property other than those which relate to its use as farm, forest, or open space land. Relief will not be discontinued with change of ownership, only with change in land use. The law also allows for "roll-back" taxes when the land use changes, for the year of the change in use and for any of the two preceding tax years in which the tax relief was given.

8. Historic Area Zoning

An act providing for historic area zoning was passed in 1959 (General Laws, Sections 45-24.1-1 through 45-24.1-13). This law serves to promote the land use goal of planning for the environment. Under this act, any municipality is authorized to establish historic districts in the same way that it establishes zoning areas. Local historic district commissions are to review applications for alterations affecting the exterior appearance of structures within established districts. In the case of rejection, the building inspector may not issue a permit. Standards and exceptions are specified in

²⁵ Rhode Island Statewide Planning Program, Public Rights-of-Way to the Shore (Providence, Rhode Island: 1970).

the law. The law provides for six specific municipalities to exercise the same powers for individual structures. Six municipalities have enacted ordinances, and four have created districts. The statewide survey of the state Historical Preservation Commission is identifying many other potential districts.

9. Housing and Redevelopment

The state laws related to housing and redevelopment can be considered as means of implementing land use goals for older central cities, for urban growth, and for housing.

Six chapters of Title 45 of the <u>General Laws</u> make provision for local housing authorities. The authorities are given a broad range of powers related to the acquisition, development, and management of property and to the provision of facilities and services. Presently 29 of the state's 39 cities and towns have established housing authorities.26

Enabling legislation for local minimum housing standards appears in Chapter 45-24.2 of the General Laws. Cities and towns are authorized to enact regulations for establishment and enforcement of standards, to establish enforcement agencies and boards of review, and to set penalties for violations. Provision is made for rent escrow accounts to pay for repair of dangerous conditions. By mid-1972, minimum housing inspectors were active in all but four municipalities. 27

Statewide minimum housing standards (not intended to eliminate local standards) are set forth in Chapter 45-24.3 of the <u>General Laws</u>. The law consists of a code, followed by related provisions dealing with enforcement, review boards, rules and regulations, and so forth. This code is not enforced at the state level; it is enforced by some municipalities.

Chapters 45-31 through 45-33 of the General Laws provide for the redevelopment of "blighted and substandard areas." Chapter 31 contains declarations of purposes, methods, and public policy and creates a redevelopment agency in each community (thirteen communities now have activated redevelopment agencies 28). Chapter 31.1 authorizes local code enforcement projects. Chapter 32 includes the major substantive provisions for carrying out redevelopment: acquisition and improvement of property, management and disposal of property, preparation of plans, payment for relocation costs, and the like. Chapter 32.1 permits acceptance of federal redevelopment aid for hospital and educational purposes. Chapter 33 covers redevelopment financing: revolving funds, bonds, appropriations, borrowing, and federal and state aid.

²⁶ Rhode Island Department of Community Affairs

²⁷ Ibid.

^{28 &}lt;u>Ibid</u>.

10. Industrial and Recreational Building Authorities and Development Corporations

A state Industrial Building Authority was established in Chapter 42-34 of the General Laws; a Recreational Building Authority, in Chapter 42-38. Both agencies are associated with the Rhode Island Development Council and are intended to encourage industrial growth by guaranteeing mortgage loans. As of 1971 the former had assisted 75 plants or expansions, the latter had assisted thirteen, and both were approaching the ceilings on their guaranteeing authority. 29

.Two other entities associated with the Development Council, the Narragansett Industrial Development Corporation and the Howard Development Corporation, have been created to acquire and develop land for industrial purposes at specific sites.

These programs can be instrumental in carrying out state land use policies for environmental planning, economic development, and open space.

11. Highway Beautification

Several state laws provide for limited land use control near highways, thus serving to implement goals and policies of the land use plan for environmental planning, urban growth, and transportation. All three programs have been limited by inadequate funding, and they apply only to federal-aid highways.

The act on beautification of federal-aid highways (Chapter 37-6.2 of the General Laws) permits state acquisition of land for "enhancement of scenic beauty" and for development of rest and recreation areas. Under this program, ten sites have been acquired, and one highway has been landscaped. 30 The outdoor advertising act (Chapter 24-10.1) allows the state to regulate outdoor advertising in areas adjacent to interstate and primary highways, to remove non-conforming advertising, and to fine violators (certain signs are exempted). To date, an inventory has been compiled and removal of about 70 billboards is planned. 31 Under the junkyard control act (Chapter 24-14), the state may treat as public nuisances junkyards within 1,000 feet of interstate or primary highways, unless they existed before enactment of the law, are screened, or are in areas zoned or used for industry. So far three junkyards which pre-dated the law have been screened by the state. 32

²⁹ Digest of Annual Reports of State Agencies 1970-71 (Providence, Rhode Island: Rhode Island Department of Administration, 1971).

³⁰ Rhode Island Department of Transportation.

³¹ Ibid

³² Ibid.

12. Airport Environs Controls

Airport zoning is provided for in Chapter 1-3 of the General Laws. This type of control can serve to implement the transportation goals of the land use plan. The law directs the state to adopt airport approach plans for public airports. It declares that the establishment of airport hazards (obstructions in required airspace) is to be prevented and enforced through exercise of the police power. Accordingly, several affected communities have incorporated airport environs restrictions in their zoning ordinances.

13. Local Planning Boards

Chapter 45-22 of the General Laws requires cities and towns to establish planning boards or commissions, which must prepare and adopt comprehensive community plans. Such plans must be "in general conformity with the goals, objectives, policies, and general arrangements contained in (any) applicable state plan." This law, although not a direct land use control, does provide a means for implementing policies of the land use plan.

14. Offical Map Techniques

Chapter 45-23.1 of the General Laws authorizes municipalities which have planning boards to establish official maps. The map may show both existing and planned streets. Permits for building in mapped streets may not be issued unless the parcel cannot otherwise yield a reasonable return. This law, in that it promotes the orderly layout and use of land, can help implement land use goals for overall planning and for transportation. To date, only three municipalities have used the enabling legislation.

15. Capital Improvement Programming

In 1971 the state Budget Division assumed responsibility for preparation of the state capital development program. Capital needs are derived from state agency requests, the state investment plan, functional elements of the State Guide Plan, and other recommendations of the Budget Division. These needs are analyzed in view of all the state's needs and priorities, and the proposed program is integrated "with a broad-scale, long-term supporting fiscal program."33

The development of a capital improvement programming system which integrates State Guide Plan proposals with the state budgeting procedure is an important means of providing for public investment in needed conservation and recreation land and in other facilities as part of a consistent program.

³³ State of Rhode Island, <u>Capital Development Program 1973-1984</u> (Providence, Rhode Island: 1972), p.11.

16. Evaluation, Review, and Coordination of Federal Projects

Under a federal project notification and review system, contemplated applications to about 100 federal grant programs are sent to a state or regional "clearinghouse" (in Rhode Island, the Statewide Planning Program) which makes comments and recommendations regarding conflicts with other plans and projects. The clearinghouse agency refers proposals to other interested parties for comment, in addition to conducting its own evaluation. The subject matter of comments and recommendations may include many types of information which is closely related to land use planning.

Since the inception of this review system, which has been greatly expanded in the past few years, over 500 grant applications have been reviewed by the Statewide Planning Program. Reviews have also been made of direct federal development activities, of state plans, and of environmental impact statements. This kind of coordination can be useful in implementing the state land use policies and plan, since many federal programs covered under the system have considerable potential for affecting land use.

B. LAWS AND PROGRAMS CURRENTLY BEING DEVELOPED

Several other types of land development controls are still in the formulative stage but may be considered as potential implementation measures for the state land use plan.

1. Flood Plain Controls

During 1970 Rhode Island began participating in the National Flood Insurance Program, which provides federally subsized flood insurance to property-owners in communities which have qualified for the program. A community must have basic land use and control measures in effect and must legally commit itself to enact more specific land use and control measures which are consistent with federal standards and which will minimize risks from flooding in the future. Such controls conform with land use goals for the shore region. As of October, 1972, ten Rhode Island communities were in the emergency flood insurance program, thus enabling existing structures to receive flood insurance at subsidized rates. Fifteen communities had been accepted in the regular program and had adopted or were preparing appropriate land use and control measures.

In fiscal year 1974 the Statewide Planning Program proposes to study development controls for areas subject to flooding. This study would recommend controls for inclusion in local ordinances and state statutes. (Presently, state control over flood-prone areas is limited to regulation under the fresh water wetlands act.)

2. Protection of Natural Areas

During 1971 a survey of unique and significant natural areas in Rhode Island was carried out by the Audubon Society. A total of 219 areas were accepted for inclusion in the final report. Each area was identified, described, and evaluated. The aim of the inventory is to assist in the preservation of natural features which may be threatened by commercial and industrial development or by environmental forces. Thus the survey responds to several land use goals, since it is an attempt to reduce the conflict between development and the natural environment and to protect certain open-space areas.

3. Standardization of Building Regulations

State Building Code:

In the 1970 session of the General Assembly, an act was passed establishing a commission to study a state building code. The commission recommended that a code be formulated, but no further action has been taken by the General Assembly. The final results of the commission's work are pertinent to the goals of the land use plan, since standardization of building codes would help ameliorate housing problems by increasing efficiency and lowering construction costs.

Factory-built Housing Standards:

Related legislation which also was introduced but not acted upon by the General Assembly was an act to regulate factory-built housing. This act would allow the Department of Community Affairs to approve factory-built housing according to regulations which it would be authorized to adopt. Such housing would then automatically be considered to be in compliance with local regulations, although it would have to conform with applicable local zoning requirements.

As with a state building code, this proposal would help reduce constraints to housing production. Both bills would further specific land use goals: to "provide for adequate and diversified housing" and to "make more efficient and aesthetic use of land for housing, by introducing new compact development patterns and housing types".

4. Revision of Subdivision and Zoning Controls

The subdivision and zoning enabling acts, by which the state has delegated to cities and towns much of its power to control land use, are two of the most important land use provisions now in effect.

Existing Legislation:

Chapter 45-23 of the General Laws enables city and town councils to enact ordinances which authorize planning commissions to regulate subdivision of land. Regulations may provide for characteristics of streets, utility mains, lots, and open spaces. Chapter 45-24 enables city and town councils to enact zoning ordinances which regulate the height and size of buildings; the size of yards and other open spaces; the density of population; and the location and use of buildings and land. Councils may divide a city of town into districts, and regulations may differ from district to district but must be uniform for each type of building within a single district.

The purposes of subdivision and zoning enabling acts are closely related to the goals of the land use plan: to promote coordinated development of unbuilt areas, to conserve natural beauty, to facilitate provision of public services, to encourage the most appropriate use of land.

Proposed Revisions:

Both the subdivision and the zoning enabling acts were subjects of legislation introduced but not passed in the 1970, 1971 and 1972 sessions of the General Assembly. One bill would amend the subdivision act by providing for limiting development of land subject to flooding and by permitting subdivision for planned unit and cluster development. Specific provisions are made for planned unit development.

The other proposed legislation would significantly amend the zoning enabling act. The purposes of zoning ordinances would be expanded, repeating some of the goals of the land use plan for urban growth and open space and specifically providing for "the implementation of land use and development policies, goals, and patterns contained in ... any State guide plan." One of the major changes proposed for the zoning act is that provision be made for cluster and planned unit development. These provisions could be extremely useful in encouraging more attractive and efficient urban growth and in better meeting housing needs. Under the proposed changes, zoning ordinances would also be permitted to provide for the use of performance standards to regulate pollution, control of extractive industries, restriction of development in valuable natural areas, and regulation of signs.

There is one other important change which should be made to the zoning enabling act, although it was not included in the proposed bill described above. This change relates to the powers of the zoning board of review and to the procedures for appeals and applications. The key to the problem is the use of the phrase "undue hardship," by which zoning boards destroy efforts to regulate the use of

land and structures in the public interest and in conformance with the comprehensive plan. Since the legislation does not provide standards for determining what constitutes "undue hardship," zoning boards are free to construe almost anything as "undue hardship." Several state courts have attempted to formulate standards themselves, which state that before a variance may be granted on the grounds of undue hardship, there must be evidence in the record that:

- (1) the land cannot yield a reasonable return if used only for a purpose allowed in the zone in which it is located;
- (2) the plight of the owner is due to unique circumstances and not to the general conditions of the neighborhood; and
- (3) the variance sought will not alter the essential character of the neighborhood.

These standards set forth a clear description of the material which an applicant must submit in support of a request for a variance and of the material which a board of review must consider and incorporate into its record. They also at least by implication exclude consideration of personal hardship, which is the real reason that most variances are granted. The continuing existence of this problem, and the demand by many courts for inclusion of adequate standards, should be met by including provisions in the enabling act which would:

- (1) establish standards similar to those summarized above which boards of review must follow in considering applications for variances;
- (2) describe the subject matter which an application for variance must address;
- (3) describe the subject matter, such as personal hardship, which an application may not include and which a board of review may not consider; and
- (4) prescribe the minimum content of the record on which a board of review grants a variance.

5. Inter-Municipal Zoning Board of Review

An act was introduced in the 1969, 1970, and 1971 sessions of the General Assembly to create a state-level inter-municipal zoning board of review. The board would have power to hear and decide appeals of a community when an action of another municipality's zoning board or council would affect land use within 500 feet of the boundary line of the adjacent municipality. The board would be able to "affirm, nullify or modify" local actions in such cases.

The bill also stipulates that notices of hearings and of decisions for variance exceptions, or amendments to zoning ordinances which would affect land use within the area of jurisdiction described would have to be sent to the adjacent community and to the inter-municipal board. Enactment of this proposal would help implement the land use goal of governmental action and the policy to coordinate local plans and projects.

6. Industrial Land Bank

In 1970 session of the General Assembly enacted a law called the "Rhode Island Land Development Corporation Act." It was repealed in 1972. The intent of the law was to reserve land for future industrial and commercial development. This law would have established a mechanism for implementing the land use goals and policies for economic development.

According to this proposal, a state corporation would be set up for the purpose of acquiring, constructing, financing, and leasing projects (ordinarily at least 100 acres). The project should be suitable for industrial, manufacturing, commercial, or warehousing purposes, with certain exceptions. Specific provision is made that projects be "in accordance with, and in furtherance of, the state's land use plan." The corporation would be authorized to issue revenue bonds and would be tax exempt.

Legislation similar to that described above was enacted in 1972 (Chapter 37-19 of the General Laws), for the specific purpose of developing for industrial use surplus state land at the Howard institutional complex in Cranston. Another similar corporation, the Narragansett Industrial Development Corporation, was organized by the Development Council in 1969 to develop land adjacent to the Narragansett Bay Campus of the University of Rhode Island.

C. PROPOSED LAWS AND PROGRAMS

This section considers implementation measures which have not previously been established or proposed. The discussion is limited to techniques-specifically designed for land use control, although it is recognized that other factors may have an equal or greater role in determining land use.

Basic Recommendation

Probably the most important limitation on land use regulation is the role of fiscal policy in shaping urban growth. Since local governments are so dependent on the property tax, they frequently resort to what is called fiscal zoning: the use of land use controls to help solve financial problems. The aim is to attract uses which will produce revenue and to discourage uses which do not produce

revenue or which are thought to increase costs. The resulting regulations frequently bear no relation to the development needs of the area, or to the level of utility systems and other services available. A number of remedies have been proposed which would provide more local revenue from other sources than property taxes.

Property tax reform is closely related to implementation of the state land use policies and plan. The policies and plan are based on the assumption that local fiscal considerations will no longer be a major determinant of land use patterns. For example, the land use plan reserves generous amounts of land in certain parts of the state for recreation and conservation use, and large areas for no development at all. The plan indicates nine towns as having no major industrial development. Such recommendations are realistic only if cities and towns will no longer be dependent on the property tax as their prime source of revenue at this crucial that this financial issue be resolved if the state land use policies and plan are to be achieved.

The following proposals describe in greater detail several specific land use control techniques which may be undertaken at the state level.

1. Changes in Taxation of Open Space Land

The state law regarding taxation of farm, forest, and open space land has potential as a method of implementing land use policies for environmental planning, for urban growth, and for open space. However, there are several ways in which this law could be improved.

One possible improvement relates to the "roll-back" provision. A short roll-back tax period has the disadvantages of benefiting speculators and of not preserving open space land for long. On the other hand, a long roll-back period will discourage owners from applying to the program. One suggestion is to replace the roll-back tax with a state capital gains tax on the land profit equal to the 25 percent federal capital gains tax.33 The tax could be returned to municipalities. This proposal would create a greater inducement to preserve undeveloped land but would make owners less reluctant to apply than if they were faced with a five or ten year roll-back tax of unknown magnitude.

³³ Arch M. Woodruff, "Use of Valuation for Open Space," Bureau of Government Research Newsletter, vol. XIII, no. 2 (Kingston, Rhode Island: University of Rhode Island, October, 1971).

Several other amendments would improve this law. The law should set forth more explicit definitions and standards; for example, it should spell out more rigorously the characteristics of a farm. A minimum acreage figure should be established. An attempt should be made to make local tax assessmentmore equitable and uniform. Periodic re-evaluations should be required. The state should encourage owners to open their land to public recreational use, by providing for limited liability (a bill to this effect was introduced in the General Assembly in 1972 but did not pass). The open space tax abatement program should be linked to local plans and development controls, as by stipulating that a community change to "open space" the zoning of any area which qualifies for the reduced assessment. The undeveloped nature of such an area would then be placed on a more permanent basis, since another zoning change would be required if an owner desired to develop the land. proposal would be for the state to compensate municipalities for property tax revenue lost through open space tax abatements (or exemptions). These "payments in lieu of taxes", which could be supported by the collection of fees at state recreation areas, would encourage municipalities to protect agricultural and open space land.

2. State Offical Map

In order to promote efficient and coordinated development and to provide adequately for public facilities, the state should be authorized to prepare and adopt an official map. Unlike local official maps, it would show the location not only of roads but of land reserved for any public rights-of-way or facilities in which there is state financial participation and reserved for facilities of statewide public development corporations. Included would be existing and future transportation facilities, utilities facilities, recreation areas, reservoirs, and land for public institutions.

An appropriate state agency would prepare the official map, in consultation with other public agencies, which could request the inclusion of areas projected for their facilities. Periodic revisions would be required. Reserved areas would be shown in terms of corridors and sites rather than by precise boundaries. Land designated on the map could be acquired by a public body at any time. An owner would have certain benefits, however, such as reduced taxes and permission to develop in case of hardship if the agency did not acquire the land within a specified time period. Early acquisition of reserved land by the state should be facilitated through the establishment of a revolving fund, in order to avoid pre-emption by other uses. Acquisition for the future is usually upheld by the courts if it is found to be for a public purpose and necessary: if a specific public use is scheduled, if future needs are being anticipated reasonably, and if the land is put to another public use in the interim. 34

³⁴ Fred P. Bosselman, Alternatives to Urban Sprawl, Research Report Number 15, prepared for the National Commission on Urban Problems (Washington, D.C.: U.S. Government Printing Office, 1968), pp. 41-44 and 56-57.

3. Open Space Development Rights and Easements

Rhode Island law presently allows state acquisition of development rights and easements, mainly for transportion, utilities, and recreation and conservation. Most state-owned easements are for small parcels and allow the state access or specific use of property. The state should institute two other types of easement and development rights programs.

Historic Easements:

Presently, it is possible for the state to acquire historic easements, but no specific program or funding exists. Under such a program, an owner of a historic property enters into a legal agreement with the state in which he promises to preserve the basic character of his property by keeping it in certain restricted uses. The state, or the public, is not necessarily given use of or access to a property, but a valuable historic property is preserved in the public interest. Properties which qualify would be those on the state or National Register of Historic Places.

Historic easements would be provided for in state law and would be administered through appropriate state agencies. Terms would vary with each individual agreement. Although payment of a nominal sum would be ideal, it might rarely be possible, and lack of appropriations to support the program might be a severe limitation, along with the voluntary aspect.

Open Space Development Rights:

The second new development-rights program which should be established by the state would be considerably different in purpose and operation from historic or scenic easements and would have much greater implications in terms of controlling land use. The purpose would be to control the timing and location of development on the fringes of built-up areas. The method used by the state would be to

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acquire "holding zone" land rights for a specified period of time, through exercise of the power of eminent domain. The public purpose invoked to justify condemnation would be prevention of urban sprawl, based on the realization that future hazard is as serious as an existing slum and that urban sprawl poses a hazard to public health and welfare. 35 This technique would deal with growth in a positive way, recognizing the need for development but directing it into a more compact and efficient pattern of land use.

Development rights of this type would be administered by a state urban development corporation or by an appropriate existing agency. A revolving fund would be established to purchase the rights. As with the official map technique, the owner would be able to put reserved land to a non-intensive use during the term of the development rights agreement.

This program would conform closely with the land use goals for planning, for urban growth, and for open space. It could be used to implement the policies and plan directly, by providing a mechanism for reserving open space areas from development and for guiding urban expansion.

4. Modified New Communities Program

Another proposal which appears in several recent national studies of urban growth is to have more large-scale planned developments, assisted by the government. There is widespread agreement that urban sprawl is a rapidly growing and undesirable phenomenon; that traditional land regulation techniques such as zoning and subdivision regulations have been inadequate to prevent urban sprawl; that large-scale planned development represents an attractive alternative; and that there is a need for new techniques to encourage and control large-scale urban development.

Large-scale or new community development has many advantages. It takes place on the basis of orderly, comprehensive planning, therefore leading to more coherent and efficient development and probably to more interesting and attractive designs. More open space and natural features can be preserved, because of more flexible, planned development. Economy is achieved with many development costs. A range of housing choice and of employment sources can often be provided. Recreation areas and community facilities can be

³⁵ Bosselman, p.46.

properly related to residential patterns. New communities may facilitate local planning and management by allowing attention to be focused on a single area and by making community needs easier to calculate. Finally, new communities offer more intangilbe types of opportunities because of their prototype nature; they can be viewed as valuable testing grounds for experimentation in many fields.

Proposals:

A new communities proposal in Rhode Island would be aimed at creating not independent "new towns," but large-scale planned developments with varied land uses. The state is an unlikely place for development of a new town: all the land in the state is incorporated in municipalities, almost all is zoned, and no large areas are uninhabited (except for wetlands and park areas). Rhode Island would be a suitable location, however, for small-scale planned new communities formed by expanding small existing urban centers. The state has many outlying villages, some stagnating from outmigration of industry and population and some suffering from the effects of sprawl, which could be used as nuclei for new planned urban development, as envisioned in the alternative plans for industrial ring development and outlying communities development. Thus a new community program in Rhode Island could serve the dual purposes of controlling future urban growth and of reversing present physical blight in outlying villages.

The establishment of a state-sponsored program for large-scale development would be justified on the basis of the desirability of the advantages enumerated in the preceding section and on the basis of the need for initiative and assistance on the part of the state. Large-scale development has not attracted private developers and local agencies, mainly because of the difficulty of assembling land, because of the capital investment required, and because of deficiencies of existing land use controls. To overcome these obstacles, the state should provide a program of facility coordination and construction incentives, to be operated by a newly created urban development corporation.

In its role as coordinator, the corporation would have responsibility for controlling, encouraging, and sometimes initiating largescale developments. The corporation would approve site plans and development, working closely with concerned agencies and organizations and in accordance with statutory procedures, but the actual work would be carried out by private developers or local agencies. The other role of the corporation would be to provide construction incentives, designed to reduce the obstacles to large-scale development. One type of incentive, aimed at the land-assembly obstacle, would be that the corporation would have the power to acquire land by negotiation or, if necessary, by eminent domain, and either to dispose of land or to retain it as open space (in order to guide growth around the fringes of developed areas, as mentioned in the preceding

proposal for open space development rights). The second type of incentive, aimed at the cost obstacle, would be that the corporation would make available to developers a wide range of assistance for community services and facilities, by coordinating existing federal and state programs. As a third type of incentive, to reduce the obstacle of inadequate regulatory mechanisms, the urban development corporation would be authorized to exempt new communities developers from local regulations which are not practical or reasonable for a particular proposal. Projects would be subject to local review, comment, and inspection; but they would be bound only by statewide housing standards and building regulations and by established but flexible standards and new land regulation techniques. (At least two requirements would be to have a certain proportion of low and moderate-income housing and to conform with applicable statewide policies and plans).

5. State Land Use Controls

Even if all the above measures were to be effected, at least two major gaps would remain in terms of implementing the state land use policies and plan. First, certain areas of critical importance to the state would not be adequately protected or controlled. Because the state has a vital interest (in the sense of public investment, value of resources, or regional impact), the development of such key areas should be carefully planned and guided. Second, there would be no means of assuring that future development would follow the policies and the broad outlines of the land use plan. The existing and proposed implementation measures described above would constitute a series of piecemeal actions to promote the land use policies and plan rather than a coherent statewide program to carry them out. No framework would have been established for attaining the primary goal of planning for the environment, and no comprehensive approach would have been initiated for solving state-level land use problems. In order to remedy these two deficiencies, a system of state land use controls should be instituted.

Concept:

The basic purpose of state land use controls is to direct growth toward the most desirable pattern of development, so that land use is properly related to the level of services or protection required. For example, the most desirable pattern for a particular area, as expressed in the land use policies and plan, might be a core of high-density residential use surrounded by a larger expanse of low-density residential use. The purpose of land use controls would be to assure that the high-density uses do not extend into the outer area, where the level of services (water, sewer, police, fire) is not adequate.

A system of state land use controls should be flexible and general, unlike the local system of traditional zoning controls, which are specific, at a level aimed at buildings, lots, and neighborhoods. Local zoning regulations would not be replaced by this state system. Rather, they would be overlaid by state land use controls which are aimed at the broad pattern of physical development and at limited, clearly defined areas of critical state concern. Thus each level of government would exercise control at a scale consistent with its interest. State controls would be at an even broader scale than the state land use plan (see map), which has ten general categories of use. A state control system would operate by further generalizing the land use plan into three or four categories and by setting standards to be met for each category in terms of permitted uses, density, level of services, and so forth. Standards would be based on the state land use policies.

The categories in a state land use control system might be (1) urban areas, (2) rural areas, (3) conservation areas, and (4) critical areas. Other variations are possible. The critical areas would include a number of specific sub-categories such as highway interchanges, mass transit terminals, airports, water supply sources, flood plains, wetlands, the salt water shore area, significant natural areas, historic sites, and possibly others. An area might be of critical interest to the state because of its value as a public investment, its importance as a resource, or its large scale and statewide impact. Another type of area which could in the future become a category in a state land use control system, if not included among "critical areas," is the large planned-unit development zone.

Administration:

Implementation would be accomplished through the enactment of legislation. The Statewide Planning Program, with the cooperation of other state and local agencies, would be responsible for preparing the state land use policies and plan and for setting the standards and criteria in the control system. Regular revisions would be required. The policies and the system would be officially adopted, amended, and administered by an appropriate state entity.

Administration of this program would consist of assuring that major local land use and development controls (such as zoning ordinances and subdivision regulations) and their administration are consistent with the state standards and criteria. Local controls would have to be reviewed and approved by the state. If the controls were found to be inadequate for implementing the state land use policies and plan, the state would notify the local government unit of its findings and recommendations. If the local government then did not make its controls consistent with the state standards within a specified period of time, the state would be authorized to adopt and enforce the necessary measures, which could then take precedence over the applicable local development regulations and controls.

In regard to designated critical areas, the state would have additional review powers. It would be authorized to review all building and occupancy permits which are granted in such areas by the local government and to modify, amend, add criteria or conditions to, or reverse any permit which is inconsistent with the state standards for the area. In the case of critical areas which are already regulated by a state agency, such as coastal and freshwater wetlands, administration would be left with that agency as long as its program was consistent with the state land use policies and plan, thus avoiding duplicate reviews.

D. A STRATEGY FOR IMPLEMENTING STATE LAND USE POLICIES

The preceding sections describe existing laws and programs which influence the development or use of land, and outline several methods of exerting more direct guidance over land use. Taken together, these can provide a very effective means of implementing the land use policies expressed in this plan, while at the same time preserving a substantial degree of local authority in regulating the use of land. The following sections describe a strategy for achievement of these objectives.

1. Coordination of Existing Land Use Controls

The existing land use control measures discussed in section A of Part Four are all aimed at specific and limited development issues. Each of these controls is therefore of limited value in its power to shape the development pattern of the entire state. Furthermore, even if these measures were more comprehensive, many of them are presently implemented, or may be implemented, without regard for overall state development policies or plans. For these reasons, legislation should be introduced which makes use of existing controls to regulate development in accordance with the State Guide Plan, and in particular, the policies and development patterns recommended by the state land use plan. Such legislation would require that any actions authorized by the statutes listed in section A must be consistent with the state land use policies and plan. Actions taken under the statutes listed on the following page would be included.

In addition, this legislation should be amended to include coordination with the following bills listed in section B of Part Four if they are enacted in the future: standardization of building regulations (state building code, regulation of factory-built housing), revision of subdivision and zoning enabling legislation, creation of a statewide inter-municipal zoning board of review, and establishment of an industrial "land bank."

Chapter 1-3 Sections 2-1-13 through Sections 2-1-18 through 24 Chapter 11-46.1 Chapter 20-2 Chapter 23-1 Chapter 23-25 Chapter 23-27 Chapter 24-10.1 Chapter 24-14 Chapter 32-4 Chapter 37-6.2 Chapter 37-7 Chapter 39-1 Chapter 42-27 Chapter 42-34 Chapter 42-38 Chapter 44-27 Chapter 45-22 Chapter 45-23 Chapter 45-23.1 Chapter 45-24 Chapter 45-24.1 Chapter 45-24.2 Chapter 45-24.3 Chapter 45-25 through Chapters 45-31 through 33 Chapter 45-31.1 Chapter 45-32.1 Chapter 45-35 Chapter 46-3 Chapter 46-5 Chapter 46-6 Chapter 46-12 Chapter 46-13 Chapter 46-14 Chapter 46-15

Chapter 46-23

Airport Zoning

Coastal wetlands

Freshwater wetlands Intertidal Salt Marshes Cooperation in Federal Projects (fish and wildlife restoration) Department of Health Air Pollution Building Regulation Generally Outdoor Advertising Junkyard Control Act Green Acres Land Acquisition Acquisition of Land Scenic Enhancement and Facilities, Federal-Aid Highways Management and Disposal of Land Public Utilities Commission Atomic Energy Commission Industrial Building Authority Rhode Island Recreational Building Authority Taxation of Farm, Forest and Open Space Land Local Planning Board or Commission Subdivision of Land Mapped Streets Zoning Ordinances Historic Area Zoning Minimum Housing Standards The Rhode Island Housing Maintenance and Occupancy Code

Housing authorities and housing projects

Redevelopment agencies and redevelopment projects
Redevelopment Code Enforcement
Redevelopment Aid for Hospital and Educational Purposes
Conservation Commissions
Shore Development
Construction of Port Facilities
Obstructions to Navigation
Water Pollution
Public Drinking Water Supply
Contamination of Drinking Water
Water Resources Board
An Act Creating a Coastal Resources
Management Council

2. Further Development of New Proposals

Steps should also be taken to develop further the remaining proposals in sections B and C of Part Four. Most of the detailed proposals would then be drafted into appropriate legislation to implement the land use policies and plan.

Activities directly related to several of the proposals are included in the Statewide Planning Program's current (1972-1973) and three-year work programs. These activities are:

(1) Environmental inventory

(2) Housing site study

(3) Development controls for areas subject to flooding

(4) Airport master plan (environmental aspects)

(5) State Land Register

(6) Historic preservation planning

(7) Recreation, conservation and open space planning

(8) Capital investment programming

(9) State development policies

The final activity listed above would consist of developing detailed procedures and draft legislation for implementation of state land use policies. These procedures should incorporate both general regulation of land use on a statewide basis, and more specific regulation of selected critical areas. The emphasis should be on implementing policies which are concerned with urban growth patterns, housing density standards and provision of housing for lower and moderate income and minority groups, reservation of adequate sites for economic development, and protection of open space areas and valuable natural resources.

The general controls would be based on consideration of (1) suitability of the natural environment for development and use; (2) proper relationships between the intensity of development and the level of public facilities and services provided; and (3) regional, state, and local development needs. The controls would overlay rather than replace local zoning and other development controls. The basic authority to make decisions in land use regulation would remain with the local government, but local regulations would operate within a framework of state guidelines and standards. State control of critical areas would be exercised in the same manner as the statewide general controls but would utilize more precise standards.

Rhode Island Statewide Planning Program, <u>Work Program 1972-1973</u> (Providence, Rhode Island: 1972) and amendments.

Administration of the general statewide guidelines and of the more detailed criteria for designated critical areas would require both a mechanism for setting standards at the state level and a means to implement these standards at the local level. The first requirement would be met through action by the General Assembly, establishing procedures for formulation and adoption of standards by the state in conformance with the State Guide Plan, and providing for appeals for modification of requirements which cannot reasonably be met when applied to a specific area or parcel of land.

Implementation at the local level would be achieved by action of the General Assembly, setting a maximum time period, such as two or three years, in which all cities and towns would be required to modify their existing land use and development controls (or adopt initial controls) so as to be consistent with state land use policies and standards. At the expiration of this period, state regulations would be applied directly only in those communities which did not have adequate local controls and procedures for their administration. In addition, in order to assure that state standards are properly applied to designated areas of critical concern, local building permits, subdivision approvals, and similar development decisions for these areas would be subject to state review.

APPENDIX: ENVIRONMENTAL ASSESSMENT

1. Summary of Proposed Plans or Policies

State policies for land use are set forth in Part Three. These policies are directly related to three overall goals described in Part One ("planning for the environment," "planning for economic development," and "governmental action") and to five goals for specific areas ("urban growth," "open space," "older central cities," "shore region," and "transportation").

These policies are intended to complement the 1990 state land use plan, a map (following page 16) which allocates areas to ten different categories of use: residential (high, medium, and low density), commercial, industrial, governmental institutional, airports, and open space (recreation, conservation, and woodland-open land). The amounts of land allocated to each category are described on pages 33-35, along with a table comparing this allocation to 1960 land use. In accordance with the general nature of the plan and with the emphasis on policies, the map shows areas only in terms of 92-acre grid squares. Part Two is devoted to a presentation of the plan: the methodology employed in preparing it, the land use categories (definitions and background analyses), and the plan's relation to other plans.

Proposals for implementing the state land use policies and plan are discussed in Part Four. The major recommendation is to establish a system of state land use controls based on the policies and plan, to serve as a guide or framework for local regulation of land development. Four other new techniques for state-level control of land use are explored. It is also proposed that existing state laws and programs related to development control (described at the beginning of Part Four) be coordinated with the state land use plan.

2. Environmental Impacts

Numerous beneficial impacts would result from the recommended land use policies and plan. As described at greater length on page 16, these include (1) promotion of more compact, directed growth and limiting of urban sprawl; (2) encouragement of more balanced urban development, proposing some areas of new development but recognizing the state's existing urban centers and other assets; (3) provision of adequate open space areas of all types — recreation areas, land to be kept in an undeveloped state, agricultural land, and coastal areas; and (4) an improved relationship among different governmental levels in dealing with land use.

Adverse impacts relate to the fact that, in order to meet the demands of a growing population, some presently undeveloped land will be brought into urban use for housing, industrial sites, a few

commercial areas, and recreation facilities. In addition, intensities of land use will increase in some already urbanized areas. This growth will result not only in the immediate physical impacts of land development but also in an increased burden on and demand for public facilities and services such as sewage treatment plants, transportation systems, and recreational opportunities. In order that these demands be properly met, the land use plan has been coordinated with plans for public facilities (see pages 36-41).

3. Unavoidable Adverse Impacts

Some presently wooded or open land will be brought into various kinds of urban use, and some developed land will increase in intensity of use. This growth often can adversely affect resources and facilities. However, numerous approaches were taken to mitigate such adverse impacts:

- (1) a population ceiling for the state was expressed as a goal, based on the desirability of limiting urbanization to no more than half of the state's total land area (see pages 4-5);
- (2) compact, directed growth rather than extensive, sprawling development was established as another goal to be sought throughout the process of formulating plans and policies (see pages 8-9):
- (3) a detailed analysis was made of the suitability of land (particularly, wooded or open land) for urban development, using ten different factors which serve as restraints or assets to development (see pages 14-15);
- (4) proposals and policies for residential land use arose from a thorough study of the state's housing problems (see pages 19-20) and of projected population growth to be accommodated (see page 21);
- (5) residential patterns such as cluster zoning which are not only compact but which recognize valuable site features were encouraged (see page 52);
- (6) proposals and policies for new industrial development were based on considerations of need to expand and strengthen the state's economy (see page 22) and on a detailed analysis of potential industrial sites, considering such factors as topography, soil characteristics, proximity to water bodies, and others (see page 22),

- (7) large industrial areas were promoted, so as to increase efficiency in providing services, to allow a land reserve for future expansion, to encourage lower employee densities, and to provide an open-space buffer from conflicting uses (see page 23), and
- (8) the formulation of open space policies and areas in the plan pointed out certain natural features and resources which should be protected from urban development, such as salt marshes and unique natural areas (see pages 23-25 and 30-32).

Many of the goals set forth in Part One and the policies set forth in Part Three have reference to reducing the adverse impact of development on the environment. In fact, this can be considered a major purpose of the whole land use plan, as pointed out on page 1 of the Introduction.

4. Alternatives to the Proposed Plans or Policies

In the process of formulating the land use plan, five alternative plans, including a trend projection, were studied. The alternatives were mapped, described, analyzed in terms of advantages and disadvantages, and evaluated on the basis of certain development factors (pages 14-16).

The trend projection provides an alternative representing no action by the state in influencing the development or use of land. The policy assumed is that "the state will continue to vest land use regulation in local government" (page 42 of full report). This alternative plan or projection was worked out in considerable detail, using forecasts, municipal plans and development controls, and other public and private policy documents. The resulting pattern of land use represents the extreme in decentralization of urban development, with a 75 percent increase in developed land over 1960-1961.

5. Relationship Between Local Short-term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity

Few local short-term uses of the environment are proposed in the land use policies and plan. One is that it is possible for areas which are proposed for development in the future (and not until then) to be put to some low-intensity use in the interim, such as for recreation (see pages 84 and 86). This type of use would not affect maintenance and enhancement of long-term productivity. Another example is that some reservoirs may be used for low-intensity recreational use, with the stipulation that activities not be harmful to the water supply sources (see pages 31 and 55).

6. Irreversible and Irretrievable Commitments of Resources

Some undeveloped land would be committed to various uses if the land use policies and plan were implemented. As shown in Table 2, 488 square miles of land would be in urban or "committed" (for reservoirs, parks, and so forth) use in 1990, as compared to 242 square miles in 1960-61. (It should be noted that, of the 1990 figure, a considerable amount would be committed to recreation and to conservation use.) The additional areas would be committed according to the policies listed in Part Three and the plan shown in the map. The allocations of area are based on detailed consideration of the suitability of land for various uses; spatial relationships of land uses and public services; the need to conserve valuable natural resources; and the need to provide land for certain activities such as housing, industry, and recreation (see Part Two). As described under item (3) above, a number of approaches were taken in an attempt to minimize the adverse impacts of "irreversible and irretrievable commitments of land.

Other resources would be committed irreversibly if the land use policies and plan were carried out. For example, new land development would result in some clearing of vegetation, pollution of air, and change in the visual landscape. However, the land use policies and plan were designed with the intent that such adverse effects be less harmful than if development were allowed to continue, haphazard and undirected, according to past trends (see pages 1, 5-6, and 7-9).

7. Environmental Controls

Part Four of the report discusses land use controls which may be used to implement the policies and plan. First, existing state laws and programs related to land use control are identified. A chart is presented on pages 67-68. Next, laws and programs presently being developed are described. Several new proposals are then explored; and a strategy for implementing state land use policies is outlined, which would utilize the existing and proposed controls. All of these implementation methods are environmental controls.

